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ABSTRACT

This handbook outlines procedures for planning and conducting follow-up studies of clients involved in chemical dependency programs. It is organized into eight chapters. Chapter I discusses purposes and applications of client follow-up studies. Studies may be used in program evaluation, program design, and staff development. Also, the study itself can provide an extension of program services. Chapter II describes the content of the study. Topics include outlining the areas to be explored, organizing the areas into their fundamental components, and developing a questioning strategy that reliably probes each area. Chapter III focuses on sampling procedures, confidentiality, and additional sources of data to supplement the self-report of clients. Chapter IV considers procedural and cost arrangements with reference to comprehensiveness of the study, personnel requirements, confidentiality, financial resources, and consultation. Chapter V describes operating procedures such as compiling records for administering the study, locating and informing clients of the study, and pretesting study procedures. Chapter VI covers phases of data collection: planning for interviewer recruitment, selecting and training interviewers, and supervising data collection. Chapter VII discusses both computerized and non-computerized methods of arranging data for analysis. The final chapter outlines procedures for writing an evaluation report. (KC)

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CLIENT FOLLOW-UP STUDIES:
A HANDBOOK ON PROGRAM EVALUATION
FOR CHEMICAL DEPENDENCY PROGRAMS

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PREFACE

This Handbook was prepared under contract to Minnesota's Department of Public Welfare, Chemical Dependency Programs Division. It was produced chapter-by-chapter over a year's time, and distributed to over 225 chemical dependency programs throughout Minnesota as each chapter came off the press.

The major purpose of the Handbook is to guide program staff in the planning and conduct of a client follow-up study. Such studies are sometimes very complex forms of social science research, but this Handbook is directed primarily to the program administrator, whom we assume to be a layperson in the fields of social science. It is directed as much to the management of a follow-up project as to the issues of adequate research design.

A secondary purpose of the Handbook is to facilitate discussion within the program on aspects of program effectiveness. A client follow-up study is a form of program evaluation activity that provides information on how people benefit from participating in the program. Chapters I, II, and VIII are especially useful for provoking thought on how the program "impacts" on clients, and how the program might become more responsive to the needs and strengths of program participants.

This Handbook was begun after two years' intensive work in the conduct of three major follow-up studies, each with the support of DPW. One concerned Minnesota's extensive system of "detox centers." Another concerned 11 early intervention programs directed at "underserved populations" in Hennepin County. And the third involved four residential treatment programs and halfway houses in Duluth.

We tried in this Handbook to pull together the wisdom gained in doing this kind of study, hoping to advance the "state of the art" of evaluation in Minnesota's chemical dependency programs. We strongly believe that programs can improve themselves dramatically by paying attention to their actual impact on the people they serve, and by changing their approach accordingly. This Handbook attempts to guide that effort.

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Evaluation Tools and Procedures: A Handbook for Chemical Dependency Programs

Steven E. Mayer, Ph.D.
Judie J. Steiner
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CHAPTER 1

September, 1978

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CHAPTER I. PURPOSES AND APPLICATIONS OF CLIENT FOLLOW-UP STUDIES[1]

by
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A "program" could be defined as an organization designed to provide services to a definable group of people ("clients") so that a certain kind of benefit or outcome results. The purpose of program evaluation is to learn whether the services were provided appropriately, whether the clients realized the intended benefits, and at what cost. Program evaluation is a process that illucidates the value and costs of a program's efforts to produce the desired outcomes, whether they be changes in people or systems.

Evaluation can focus on many different aspects of a program's endeavors: the management of fiscal resources, the quality of its personnel, its image in the community, its attempts to help people, and the way people are actually helped.

Professional evaluators typically classify evaluation activities as "process evaluation" or "outcome evaluation." Process evaluation is primarily concerned with the appropriate management of resources and with the process of providing services. It involves such things as financial management, contract compliance, client flow, adherence to professional standards, and implementation of program design. In short, process evaluation looks at whether services are being delivered competently and appropriately.

Outcome evaluation is concerned with discovering what happens to clients as a result of receiving services from the program. It tries to answer the

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[1]This chapter of "Evaluation Tools & Procedures" was prepared under contract #29055-29056 with the State of Minnesota, Department of Public Welfare.

question, did the person (or the situation) change in the intended way? The goal of outcome evaluation is to determine what impact the services had on those who received them; it tries to reconcile the outcomes actually experienced with the objectives of the program.

In the chemical dependency field, the outcomes expected from participation in a program can often be identified from an examination of the program's objectives. Detoxification programs have as their objectives the safe withdrawal from dangerous states of intoxication, and engagement of the detoxified person in an appropriate diagnostic and referral procedure. An outcome evaluation of this program would ask whether clients were effectively and safely detoxified, and whether clients were diagnosed accurately and provided an appropriate referral. (The astute reader will notice that we have refrained from defining "effectively", "safely", "accurately", and "appropriate". These terms will be discussed in Chapter 2; the intent here is merely to describe the focus of outcome evaluation.)

Similarly, early intervention programs that target on traditionally underserved populations often have as their goals an accurate chemical dependency assessment, and a referral appropriate to the special cultural needs of their clients. Outcome questions would then ask, was the referral "culturally appropriate", was it appropriate to the seriousness of the chemical misuse, and did the use of services result in prevention of problems associated with later stages of chemical dependency?

As a final example, residential treatment programs are often established to provide services that enable their clients to recover from the ravages of

chemical dependency and lead lives of quality sobriety. An outcome evaluation would ascertain whether these people were now sober, and whether their lives have improved qualitatively as a result of the treatment provided by the program.

Outcome evaluation, then, insists that the proof is in the pudding. We have only half the picture when we know that funds were not mismanaged, or that the facilities passed inspection, or that staff were properly certified, or that clients received 2.3 hours of counseling a day, or that 70% left the program with staff approval.

The other half is concerned, very bluntly, with the question, "So what?" Is the person now detoxified? Is the person no longer abusing chemicals and is his life now more comfortable? Did the person change his chemical use in such a way that he is causing fewer problems for himself or others?

The primary method for answering these questions is the follow-up study, in which former clients are located and questioned concerning their attainment of the program's objectives. The intent is to learn whether people exposed to the program did change in the intended ways, whether these changes were beneficial, and whether any of the changes can be attributed to their participation in the program. Actually, these questions are exceedingly difficult to answer, and the issue of research design could fill volumes. Any one evaluation attempt must be limited in scope and well-planned.

The purpose of the remaining chapters in this handbook that deal with outcome evaluation is to elaborate on some tools and procedures that were recently used in a series of demonstration follow-up studies sponsored by the

Chemical Dependency Program Division of Minnesota's Department of Public Welfare, and which should be useful in the planning and administration of client follow-up studies.

APPLICATIONS OF FOLLOW-UP STUDIES

Knowing the impact of services on clients, as ascertained by a follow-up study, has many uses.

Follow-Up as Contributing to Program Evaluation

From a knowledge of outcomes attributable to program participation, a program can:

Learn whether objectives are being met.

Most programs have had to specify their program objectives to receive funds, a license, or blessings from the Board. Often, these objectives refer to inducing program participants to change in ways that should be noticeable some time after leaving the program. A frequent objective of Minnesota's treatment facilities is for the client to attain a chemically-free (intoxicating chemicals) life style following treatment. Follow-up informs the program to what extent this objective is achieved.

Learn impact of services.

Aside from the benefits specifically intended by the program, there are often other outcomes that occur, some beneficial and others not.

A major problem in the chemical dependency field is that we know very little about what happens to people as a result of services, or even what happens

to people following services. The phenomenon of active chemical misuse and dependency is tremendously complex, involving large portions of a person's life. It seems reasonable to assume that life following service is just as complex, and the changes people make are highly individual. It would be very helpful for a program to know just what outcomes do occur following participation in the program.

Obviously, if people have not changed at all, the program has had negligible impact. If people have changed in beneficial ways, and they believe that the program was responsible for these changes then the program has had positive impact. In contrast, if people have changed in harmful ways, and they attribute these changes to the program, then the program has had negative impact.

Compare different treatment approaches.

The reports of people participating in one kind of treatment approach can be compared with those in other approaches, to learn their relative strengths and weaknesses. Comparing outcomes of two approaches, though, is especially risky, since one has to be sure that differences in outcomes are actually due to differences in the treatment. Very often, different programs select different kinds of clients, with varying degrees of pathology, motivations, strengths and weaknesses. These, and a variety of other factors, could explain the disparity in outcomes. While client follow-up lays an appropriate basis for comparing treatments, the techniques for this kind of field experiment are complex, and generally are not discussed in this manual.

Learn about the program's strong and weak points.

The main value of asking clients about the changes they have experienced and their reactions to the program is that the program receives feedback on its own efficacy. Feedback is an essential ingredient to learning a complex task, such as how to provide appropriate services. Learning without feedback or knowledge of results is not possible. One cannot learn to drive a car while blindfolded, nor can one learn arithmetic without eventually seeing the right answers. Similarly, one cannot learn how to provide appropriate chemical dependency services without seeing the results. Doing follow-up is a way to see the results, and not getting these results is like operating with a blindfold.

Follow-Up as Contributing to Program Design

A knowledge of the program's strong and weak points allows the program to rectify the weak points and augment the strong points.

If follow-up questions are asked about different areas of life-adjustment, the program can see in which areas a person, or groups of people, are having trouble. Knowing which areas of life are especially troublesome to its clients enables a program to address these areas more meaningfully. It may include the way it does outreach to attract certain kinds of people, the way it screens clients into appropriate programs, how it writes treatment plans to deal with those strong or weak areas, and how it does aftercare planning to provide for those areas after the person leaves.

For example, upon hearing that clients of a certain program have had a particularly difficult time making adjustments in the area of their sexuality, the program can make the following basic changes:

1) Screen people with sexual difficulties into a more appropriate or additional program.

2) Include something in the program itself in the area of sexuality.

3) Include something in the aftercare plan that addresses sexuality.

These three options may not be equally desirable, or easy to do from a programming standpoint, nor are they likely to produce the same results. They do, however, illustrate the major junctures in a program where changes can be implemented.

All three of these courses of action require greater sensitivity to problem areas when client histories are being taken, so that treatment plans can be more responsive, and more realistic expectations can be communicated between counselor and client.

Learning that a program is especially good with some well-defined problems or life-situations could lead it to specialize, where it actively seeks out people with those particular problems/situations. The program would then be an especially valuable resource because it reduces the number of poor or inappropriate referrals.

Clients are often poorly informed about the nature of chemical dependency services and have unrealistic expectations of treatment. The program's knowledge of its own efficacy should become the basis for describing the program to prospective clients. In this way programs and clients will have more realistic expectations of each other.

Follow-Up as Contributing to Staff Development

Follow-up data are valuable to staff because they provide:

Knowledge of results.

It is difficult for a counselor to know how well he did with a client until he knows how the client is doing after treatment. Unless a counselor gets this kind of closure, all his actions are based on little more than intuition. Even if a counselor's professional training indicates that a particular action is warranted, he is still acting without confirmation until the outcome is known.

Appreciation of individuality.

Each client is different, even though they may come into the program with very similar problems. Unless these differences are kept actively in mind, counselors could tend to treat everyone alike, which is clearly unrealistic and unproductive. Follow-up data reveal to counselors the ways in which their actions were actually received by clients, and the benefits derived from them. Clients' perceptions of what they receive are usually quite different from counselors' perceptions of what they give. While this may be a threatening and humbling experience for counselors, their practice as clinicians can only benefit.

Increased staff competence.

Knowledge of results provides the basis for learning. It also allows people to feel and assess their own growth as therapists and administrators. It leads to increased competence, which is inherently satisfying and also an

obvious asset to the program. Additionally, it assists better planning of one's own continuing education.

Follow-Up as an Extension of Services

Since doing follow-up involves personal contact with the client after having left the program, there is an opportunity for something positive in this contact alone.

Closure for clients.

A follow-up interview provides an excellent opportunity for the client to process and summarize his own changes. In our experience, many clients expressed great satisfaction for the opportunity to actively reflect on all that has changed since services, and to speculate on the role of the program in bringing about those changes.

Provide referral or assistance.

It might happen that a follow up contact provides the client with the opportunity to ask for additional help. From the program's perspective a referral or an invitation to participate in an aftercare program could be extended.

Follow-up is not aftercare.

Often follow-up is confused with aftercare. They are similar only in that they both involve contact with the client after leaving the program, and an assessment of how the client is doing. However, the intent is different enough that it would be nearly impossible to satisfy the purposes of follow-up and aftercare simultaneously. In aftercare, the program wants to help the client;

in follow-up the program wants to learn from the client. Aftercare is pursuasive and therapeutic; follow-up is thoughtful and reflective.

While an aftercare contact may be scary and confrontive to someone who has received chemical dependency services, a follow-up contact is inquiring, non-threatening, and not attempting to change the person. In our studies, we were continually impressed by the honesty and lack of denial that was apparent in former clients' responses. We think it is because our purpose was to learn about the person's experiences and not to push the program on them.

Follow-Up as Contributing to Public Relations

Knowledge of the program's effectiveness is useful information to communicate to others.

Communication to program monitors.

Presumably there are those people or groups wanting documentation of the effectiveness of programs. Providing knowledge of the outcomes of program services is useful to boards of directors, advisory boards, consumer groups, referral sources, lawmakers and bureaucrats.

Communication to referral sources.

Knowledge that a program is especially good with people with certain kinds of problems or experiences or life situations should be communicated to those in contact with those people/situations, so that appropriate referrals from that source will result.

Communication to the general public or potential clients.

The strengths of a particular program could be broadcast widely, so that potential consumers can make a more informed choice of programs and have more realistic expectations of the services.

Communication to service delivery planners.

Knowledge of the strengths of a particular program is valuable to planners who are concerned that the needs of their constituencies are being met. It will help reduce duplication of services and assure that effective services be delivered inexpensively. Outcome data help to ensure the program's rightful place in the continuum of care.

WHAT CAN BE LEARNED FROM CLIENTS?

There are many kinds of data one can collect from former clients and these will be the major topic of Chapter 2. This brief introduction will outline the most significant areas of feedback that can be elicited from clients.

Clients can tell you about changes they have experienced.

This is of course the major purpose of follow-up. For chemical dependency direct service programs, it is especially important to know:

1) How the person has changed his pattern of chemical use, including extent of use, "set and setting" for use, and consequences of use.

2) Whether the problems that had been associated with use at admission are now less serious. A good history taken for

treatment planning will reveal the extent that chemical use has affected the person's family life, work, social life, health, finances, spirituality, emotional health, schooling and relations with the law. At follow-up, clients can tell you whether these problems have changed and what the program provided to facilitate this change.

3) In what ways the person has changed his lifestyle and behavior. Presumably what a person learns from services is how to do things differently, so that further problems are prevented. Follow-up can show us what people are doing differently, whether the program helped them to learn that, and whether that is helpful. The program would want to know whether people are following the program's prescription, and with what consequences. Obviously, the program learns about the merits of its prescription from seeing the consequences.

Clients can tell you about their reactions to the program.

They can tell you how they felt about the staff, the facilities, the program's philosophy, the daily routine, the way they were treated and experiences that were positive and that were negative. The experience of treatment is quite painful for many people but some feel that the experience was meaningful to them, while others do not. The task is to learn what was meaningful and why.

Clients can tell you whether they "bought into the program."

This is similar to the above, but the focus is more on what they did subsequent to the program. A major category of questions concerns the use of

other services or programs following treatment. A problem arises in interpretation: if a person goes to treatment a second time, is that good or bad? Does it mean he is getting better, or worse, or beginning to become dependent on services?

Clients can offer recommendations.

With the benefit of hindsight and their own experiences former clients are often quite willing to recommend certain changes in the program or its personnel.

OVERVIEW OF A FOLLOW-UP STUDY

There are many forms a follow-up study can take and many features that require planning. The next several chapters of this Handbook will try to answer the following questions:

1) Who should be followed-up? Former clients themselves are an excellent source of data. But each and every one? Can a sample be taken? Should those who left the program before the program said they were finished be included? Should "significant others" be asked to corroborate the story? How else can stories be corroborated?

2) What should they be asked? The study objectives should be articulated first, and then translated into questions that will satisfy those objectives. A well phrased question will elicit reliable answers and invite the respondent to be candid and honest.

3) When should they be asked? Should people be contacted three months after leaving the program? Six months? Two years? Two weeks? More than once? Is there a bad time?

4) How should they be asked? Outcomes can be assessed in face-to-face interviews, telephone interviews and mailed questionnaires. There are advantages and disadvantages to each. The following chapters deal entirely with interview follow-up.

5) Who should do the asking? Many questions of "scientific integrity" and "professional integrity" arise in follow-up studies. If the program is in charge of its own evaluation, isn't it like asking the fox to guard the chicken coop? But if an outside agent does the interviewing, isn't this a violation of trust developed between counselor and client? A chapter on contractual models of follow-up will address these questions.

6) What are the qualities of a good interviewer? How does the interviewer's own attitude about chemical use affect the interview? What training does an interviewer need?

7) How should clients be contacted? What rules of client confidentiality and data privacy apply? How should interviews be scheduled? What can be done to keep track of the sample?

8) How should the data be tabulated? Are computers really necessary? Are fancy statistics needed, or is simple counting all that is necessary (once you have figured out what to count)?

9) What can be done with all those tables? No one likes to read data tables, but how can they be avoided? Who should help interpret the data? How to conduct staff meetings around the results of the follow-up. How to report data to satisfy accountability and public relations purposes.

A DISCLAIMER

Our mandate, in writing this Handbook, is to share what we know about doing follow-up to assess client outcomes. This is not to say that we know everything, only that we have learned a great deal from our experience in administration of follow-up studies.

Our most recent projects involve data collection at 21 different programs. These were 6 detox centers, 11 early intervention programs and 4 residential programs. We deliberately made the administration quite different in these projects (though the study purposes and the philosophy of questioning were similar), so that we could test out different procedures.

As one might expect, each had good and bad points. And, of course, there are many procedures we did not try at all. So far, we have not discovered the "one best way" and in all likelihood, there isn't one.

Our purpose will be to present what we did with an assessment of how well it worked. We will not elaborate on procedures we did not try, other than perhaps to introduce them and indicate why we proceeded the way we did.

Chapter I prepared September, 1978.

CHAPTER II. PLANNING A FOLLOW UP STUDY: CONTENT[1]

by

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A client follow-up study is intended to give information useful for program evaluation, program design, staff development, and public relations, as discussed in Chapter 1. The major objective of the follow-up study is to discover to what extent clients experienced the intended effects of the program.

In fulfilling this objective, the follow-up study designer should...

1) ...outline the areas to be explored in the follow-up study;

2) ...analyze each of these areas into their fundamental components;

3) ...develop a questioning strategy that reliably probes each of these areas.

This chapter explores each of these steps. The first section discusses considerations in constructing a list of the intended effects of the program. The second section of the chapter describes a procedure for defining "Effectiveness" and other big words. The third section discusses some of the issues in formulating good questions for assessing client outcome areas. The fourth section gives examples of typical evaluation questions that chemical dependency programs might consider when developing their follow-up study objectives. Finally, a sample questioning strategy is presented to illustrate some of the principles discussed in the chapter.

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[1]This chapter of "Evaluation Tools and Procedures" was prepared under contract #39055-39056 with the State of Minnesota, Department of Public Welfare.

DEVELOPING A LIST OF INTENDED PROGRAM EFFECTS

The first step in the design of a follow-up study is to develop a comprehensive list of the intended effects of the program. There are several sources for discovering what effects a program intends for its clients.

Stated program objectives or philosophy

Most stated program objectives are directly or indirectly related to client outcomes. Examples are: "provide appropriate referrals to the continuum of care", "encourage abstinence from intoxicants", "provide chemically-free living skills", "decrease the harmful consequences of chemical-use", and "rehabilitate the total person".

License requirements

The rules for licensing chemical dependency programs in Minnesota often include provisions for program evaluation. At this time, only outpatient treatment programs are required to do follow-up (Rule 43). A section of this rule specifies that questions be asked to determine the clients' "chemical use patterns, severity of problems associated with use at intake, and lifestyle indicative of recovery and prevention."

Individualized client plan

Treatment plans, discharge plans, and aftercare plans (such as those suggested in program accreditation standards) should include expectations for certain outcomes to be experienced after services are completed. These often contain goals for clients, stating what behavior, activities or events would be considered signs of "success" for a given client.

Client case files

When a client approaches a program for services, a contract between them is at least implicit. Client case files can be examined to discover the program's expectations of the client, the ways a client desires to change, and the expectations that the client has of the program.

Source of referral

Referral sources also have expectations of programs for their clients. A physician may refer a person to a program anticipating improvements in various bodily or mental functioning. A court may refer a person to a program expecting changes in that person's behavior with regard to the law. School systems, families, and employers may each hope for different kinds of outcomes. Exploring these various referral sources for their expectations is a good way to determine the intended effects of a program.

Funding contracts and funders

If a program is not entirely supported by clients, it usually receives funds from a governmental unit or foundation. Funding contracts typically specify that the program perform certain services and facilitate certain outcomes. They are often more explicit about services than about outcomes, but discussions with funders may give a clearer picture of the expected outcomes.

Discussion among staff

Often, the intended effects of a program are assumed by the staff but are rarely discussed in-depth within the program. It will be helpful for the staff, as a group, to discuss the following topics: What does your program attempt to

do for its clients? How do you recognize the signs of "successful" or "unsuccessful" outcomes in your clients? What is the difference between your program and another program, in terms of the benefits or outcomes it expects?

These discussions are useful as a form of in-service training, even if no follow-up study is contemplated. They will clarify the program's purposes by helping to articulate the outcomes intended for clients, and generally inspire a better understanding of the program among its staff.

A METHOD FOR DEFINING "EFFECTIVENESS" AND OTHER BIG WORDS

From all the previously mentioned sources, a list of intended outcomes can be developed. The list will probably contain a variety of terms, from very specific to very abstract. The abstract terms, such as "quality sobriety," "appropriate referral," or "lifestyle indicative of recovery" will most likely mean different things to different people. The next step in follow-up design is to develop precise definitions for these terms that will be acceptable to those interested in the follow-up study results.

Discovering the meaning of abstract terms

The problem is similar to that surrounding terms such as "truth," "freedom," and "democracy." We each believe we know what they mean, and yet our discussions with most everyone reveal that we differ on the central meaning of each term, on what should be included in its definition, and what should be taken as evidence of its presence.

An important task for designing the content and strategy of a client follow-up study is the rendering of these abstract terms into more definitive

terms that carry greater "shared meaning." As the meaning becomes more specific, questions can be constructed that are direct enough to yield trustworthy and useful answers (in other words, increase the reliability and validity of the study).

Imagine asking a client the question, "Did you get an appropriate referral?" An answer of "Yes" or "No" would not be helpful feedback to the program unless we were sure the client understood what we meant by the question. Obviously, the question as asked is not sufficient to give trustworthy and useful data; the notion of "appropriateness" has to be broken down into more meaningful pieces.

The process of giving greater definition to abstract terms requires that you (the study designer) keep asking the question "What do you mean?", until...

... the meaning becomes clear; when it is boiled down to its list of basic ingredients.

... the meaning is complete; when the abstract term has been compared to its precise parts to see that the whole is well-represented by these parts.

... the meaning is shared; when the audience of the study would understand the analysis of the term.

For example, when looking at the meaning of "an appropriate referral" we find several components that need to be considered. In a larger sense, appropriateness refers to the compatibility of a client with the referral in terms of ease of access to the program, and the ability of the program to relate to the person's situation. Breaking it down further, ease of access relates to cost, convenience, privacy, and personal support for access. Ability to relate

to the client's situation includes aspects of a cultural compatibility, degree of chemical involvement, personal strengths and resources of the client, and constraints that affect the client's commitment to the program. When the goal of a program is to provide appropriate referrals to its clients, questions should be asked to learn whether a referral was provided and in what ways it was appropriate.

A comprehensive follow-up study contains questions that probe important aspects of each of the outcome areas intended for clients. In this way, the resulting data will be grounded in the meanings held by the people that will be affected by the study.

Setting limits to the follow-up

You may discover from an analysis of the intended effects that the program is ambitious in its goals for clients and that the outcome areas are quite complex. A substantial number of questions may have to be asked of clients to learn whether they indeed had experienced these effects.

Generally, the more complex the area, the more time is needed in the follow-up contact to make a comprehensive assessment of the area. Time taken to explore one area means time lost to explore another. This phenomenon forces the study designer to decide which outcome areas need the most thorough (detailed) examination. The direction for the study then becomes one of exploring each of the outcome areas to the extent prioritized.

Learning about effectiveness vs. making claims of effectiveness

Programs often conduct follow-up studies to determine their "effectiveness." This is accomplished partly by assessing whether program clients experience the

outcomes intended for them. Obviously, if a program finds that all of its clients experienced the intended outcomes, it could conclude the program is "effective" in one sense of the word.

In another sense, a program could claim effectiveness for only those clients experiencing positive outcomes (as in "the program was 48% effective"), or for only those who follow the program's treatment plan (as in "for those staying with the program, the program was 76% effective").

And in still another sense, effectiveness cannot be claimed until it is shown that the program produces or facilitates positive outcomes better than, or with fewer negative side effects than no program, or an alternative program.

It is this last meaning of effectiveness that comes closest to the scientific meaning of "the effectiveness of a treatment." If you study only those people who experienced treatment, and not those who didn't experience treatment (but who could have), the data will not estimate "the effect" of treatment. Procedures for choosing appropriate control groups will be discussed in Chapter III.

QUESTION AND ANSWER STRATEGIES

The basic method of a follow-up study involves the use of a question and answer strategy.[2] That is, the primary data in a follow-up study consist of answers to questions. Considerable attention should be given to the design of an effective questioning strategy. The quality of the data will never be better than the quality of the design for asking questions and recording answers.

A good question and answer strategy is one that...

1) ...yields answers that are reliable. Reliable answers are those that are free from undesirable or irrelevant influences. Reliable answers are those that would be given consistently when asked under a variety of circumstances. Unreliable answers result from peculiarities of the interview situation or the person's momentary feelings, or confusion over the meaning of the question, or inability of the answer format to accommodate the person's true response. Some questioning styles are more likely to be reliable than others.

2) ...yields answers that are valid. Answers are valid if they actually and realistically assess the outcome area in question. To be valid, answers must first of all be reliable. The procedure discussed in the last section of this chapter is meant to enhance the validity of the questions. Validity can be shown when the answers are in agreement with other kinds of known facts that could be gathered to answer the question. For example, the reason a "significant other" is sometimes asked to corroborate (validate) another's story is because the validity of self-report data is sometimes in doubt. While validity is very difficult to test, it is known that some questioning styles are more likely to yield valid answers, than others.

3) ...uses interview time efficiently. In an effort to get reliable and valid data, a great deal of interview time can be consumed. Interview time should be invested where it will yield the most useful results.

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[2]There are other ways of taking samples of a person's post-program experience than by asking questions of that person. One can ask questions of other persons, make direct observations of the person without asking questions, take blood, urine, or body tissue samples, examine institutional records, or observe a person in a specially constructed role-play situation. While these techniques can provide valuable information to programs, they will not be discussed in this handbook.

Question formats

There are many ways of asking questions, and recording answers. Developing question formats entails at least three basic considerations:

1) Two-way vs. one-way communication. A personal interview (either face-to-face or on the telephone) is an example of two way communication. A question is asked, an answer is given, and clarification may be sought be either party. A written questionnaire is an example of one-way communication, where a question is asked and an answer is given, but no clarification is possible. A written question must clearly communicate the intended idea, since there is no opportunity to learn whether the communication was received accurately.

2) The interview can be "standardized" or "clinical". A standardized interview asks the same questions of all respondents; the interviewer conducts the same interview with each client. A clinical interview is one that is different from one client to the next, and has the advantage of tailoring the interview to each client, and the disadvantage that answers cannot be compared from one person to the next (since the questions were different). A standardized interview has the advantages of comparability across respondents, and greater ease of analysis. It has the disadvantage of appearing inflexible, since it imposes the same structure on each respondent's story. A worthwhile but difficult goal is to construct a standard format that allows one to capture as much individuality as possible, and at the same time, permit comparisons from one person to the next.

3) Questions can be "open-ended" or "closed-ended". With open-ended questions, the client's own words are recorded; with closed-ended questions, the client chooses the best answer from a prepared list of possible answers. The advantages of open-ended questions are that one hears rare and unique answers that may have escaped a predetermined list, and one keeps the special "flavor" of a personal report. They have the disadvantage of requiring considerable time afterwards to analyze and summarize the responses. Closed-ended questions have the advantage of rapid tabulation, and the disadvantages of appearing impersonal, and of requiring beforehand knowledge of the range of possible answers.

Answer formats

Along with the variety of questioning strategies, there are a number of ways to record answers. They fall into three major classes: categories, psychological units of measurement, and physical units of measurement.

As an example of categorical assessment of a person's alcohol involvement, there could be the following:

"When do you drink alcohol?"

1 = drink whenever I feel angry or depressed
2 = drink only on weekends
3 = drink whenever I can
4 = never drink alcohol

In a category system, the numbers are used only to identify the coding categories; they do not signify "quantity." The difficulty with categories is that one must be assured that they exhaust all the possibilities, and that they be non-overlapping (the above categories serve as bad examples).

Many answer formats using psychological measurement units have been developed for questionnaire studies. As examples:

a) "How often do you drink alcohol?"

1 = never
2 = seldom
3 = frequently

b) "On a 5-point scale, rate your alcohol consumption"

1	2	3	4	5
None				Heavy

c) Indicate your agreement to the following: "I am a heavy drinker"

1 = Strongly disagree
2 = Disagree
3 = Neutral
4 = Agree
5 = Strongly agree

In these examples the numbers are meant to suggest an underlying dimension of "magnitude of alcohol involvement"; higher numbers suggest greater alcohol involvement. For these kinds of ratings or rankings to be reliable, we must be assured that the continuum portrayed by the answer scale is realistic, and likely to be understood by respondents.

Sometimes a scale can be used that expresses magnitude or quantity in physical units of measurement. For example, alcohol consumption can be measured in terms of "number of ounces of 86-proof alcohol consumed per standard unit of time", which uses the physical scale of weight, expressed in ounces. To use this scale, beer and liquor and wine concentrations of alcohol per volume must first be transformed into ounces of 86-proof alcohol; also respondents must be able to estimate accurately their use for the unit of time used in the measure. Physical units of quantity have not been developed for most chemicals other than alcohol.

Most outcome variables of interest (such as "closeness" of family, "harmfulness" of use, "quality" of sobriety) do not lend themselves to answer formats with physical units of measurement. Even reliable psychological measuring units are very difficult to design. The approach suggested in the last section of this chapter is intended to enhance the reliability of measurement by forcing increasingly greater clarity in the meaning of terms used in the question and answer formats.

Many answer formats have been extensively researched for their ability to record answers reliably. Advice on these formats is available in the excellent publication by the Measurement Service Center at the University of Minnesota, "Questionnaire Brochure Series: 1. Writing Good Questions and Response Alternatives". Also, recommended is Questionnaires; Design and Use; by Berdie and Anderson (Scarecrow Press, 1974).

Already many combinations have become apparent from the above considerations. The choice of questioning and answering formats is a difficult one, and is probably guided by cost. Important costs to consider are:

1) the cost of conducting a one-way communication process vs. a two-way communication process of collecting data. The cost of an interviewer can be high, but so can the cost of developing a questionnaire of acceptable reliability.

2) the cost of analyzing the data. Closed-ended questions require time in the early design stages; open-ended questions require it after the data have been collected. If little is known about the variety of outcomes experienced by the program's clients, it is better to cast a wide net by asking open-ended questions.

3) the cost of increased detail. As a rule of thumb, the more detailed an assessment that is needed, the more questions will have to be asked; asking several "small" questions will yield greater detail (and reliability) than asking one big one. The opportunity for detail is limited by the time allowed for asking and answering questions.

4) the cost of overestimating or underestimating your program's effects because of unreliable data. Unreliable data result from questions that produce answers that are contaminated by irrelevant influences, and from answer formats that do not accommodate the true variability of program clients. Removing these sources of unreliability is also costly, in terms of efforts expended during the preliminary design. The reliability of data cannot be improved after they have been collected. Conclusions based on unreliable data can also have costly repercussions for the program, its future clients, and society.

Assessing the quality of question and answer formats

Developing good questions is a difficult task, and even the experienced researcher will spend many hours contemplating the best formats and phrasings. If a question is even slightly ambiguous or susceptible to misinterpretation, it should either be redesigned or excluded entirely. Respondents' answers to a question will never be more clear than the question itself. There are several characteristics of good questions, each of which serves to increase reliability and validity.

A good question is one that:

1) ...evokes the truth. A person is more likely to tell the truth if the question is non-threatening. An example of a threatening question would be, "You didn't get drunk last week, did you?"

2) ...asks for an answer on only one dimension or yardstick. For example, the question "How long did you go to counseling?" elicits the answer "3 months" or "3 times". While both of these are acceptable answers from one standpoint, they preclude any summarizing across clients. The question unintentionally elicits responses on two different metrics (incidence and time).

3) ...evokes an answer that most truly represents the person. Some questions are particularly sensitive to fluctuations in the person's mood (e.g., "How are you feeling these days?"). The answer you get today may be very different from the one you get in two weeks. Other questions inadvertently lead the respondent to a particular answer. Some questions may not have appropriate answer categories. Try your questions out on yourself and other people under varying circumstances, and note the variety of responses to a question. Choose a question and answer format that minimizes this kind of irrelevant variability.

4) ...elicits analyzable answers. Even open-ended questions should strive to be as specific as possible, so that the job of constructing categories is easier. An open-ended question is not the same as a general question.

5) ...can faithfully accommodate everyone on the answer scale. If a category answer format is used, categories must be able to include all the possible responses to the question, and should not overlap. Including an "other" category is usually advisable. Answer formats using psychological or physical units of measurement should have enough room at the "low" end and the "high" end to accommodate everyone's true response.

6) ...produces variability or variety in responses. If everyone gave the same response to a particular question, little information is gained. Variability is needed if one is looking for differences between various subgroups of the sample of people interviewed. Without variability, differences cannot be discovered. Answer formats should reflect the true variability in peoples' responses (without introducing variability from irrelevant factors.)

7) ...follows comfortably and logically from the questions before it. One should pay attention to the flow of questions, from the beginning to the end. It is often helpful to begin with questions that orient the client to the right time frame, recalling his/her admission to the program and the circumstances surrounding it, and to end by asking questions that encourage the client to summarize or get closure on the interview experience.

Many of the factors that make for unreliable data can be anticipated in advance and be designed out of the questionnaire or interview. Others can be discovered only by conducting a pretest or trial run of the entire procedure, practicing on your client population as much as possible. It is vitally important that such a trial run be conducted to discover sources of unreliability; many of these will not be discovered except under field conditions.

Quality control in questionnaire design

As the question and answer strategy evolves, there should be a continual review of the procedure. The following list of questions will help the researcher assess the quality of the follow-up interview or questionnaire.

1) Will the answers to this set of questions assess the outcome area as intended?
2) Can the answers to this question be summarized across people? Can Joe's answer be compared to Mary's answer? If there is no comparability, there will be the "apples and oranges" problem.
3) Can the responses be put into a data table that communicates what you want it to?
4) Is the time for exploring one outcome area justified by the priorities assigned to that particular outcome area? Is there a shorter procedure that would yield as good results?
5) Will this question, or set of questions, invite the person to be straightforward and honest?

Assessment of change

Implied in assessing client outcomes is the assessment of change in the person from his/her before-program experience to post-program experience. We are partly interested in the client's present chemical use, but we are more interested in knowing how this is different than before treatment. Similarly, we are partly interested in knowing about the client's present status of problems in his/her family life, but we are more interested in learning how this compares to family life problems prior to treatment.

Assessment of change is a difficult and technical problem. There are two basic approaches:

One is to collect data at two points in time; the difference between those two points estimates the amount of change. Those two points could be at intake and follow-up, discharge and follow-up, or two different times of follow-up.

The second approach is to collect data at only the second point in time. This approach has two variations. In one, the person is asked to estimate the degree of change since time-one. (e.g., "How much better is this problem than before treatment?") In the other, the person is asked to estimate the incidence of a particular event both at time-one and at time-two, and then the researcher subtracts to determine the amount of change. (e.g., "How many DWI's did you get the year before treatment, and the year after treatment?").

The main advantage of collecting data at only one point in time is that data collection costs can be greatly reduced. The disadvantage is that respondents may be unable to recall accurately how things were at a previous point in time. Both methods are legitimate research techniques; however, one should be aware that they may yield different results. It is also fundamentally important to consider the issue of comparison groups (see Chapter III).

EXAMPLES OF RESEARCH OBJECTIVES

In our research with chemical dependency programs, we have been able to identify several questions for which most programs would like to have answers. These became our study objectives in the demonstration projects recently conducted. They are presented here to illustrate the kinds of information which can be learned in a follow-up study. No attempt has been made to prioritize them, since each program will want to do this on an individual basis.

1) What brings clients into programs? What are the circumstances surrounding admission? What are the access points, coercive circumstances around admission, and attitudes toward admission?

2) What are the characteristics of clients in the program, in terms of demographic data, strengths and resources, problem areas, alcohol and drug use patterns, and previous services related to the present admission?

3) What do clients experience, and how do they assess the program and its procedures for admission, monitoring, assessment of problems, referral, treatment, and discharge? What can we learn about these processes from clients' reports?

4) In what ways have clients' alcohol and drug use patterns changed? What are the changes in frequency, type and amount of use, in type of drugs used, in symptomatic use and in consequences of use?

5) In what ways have there been changes in those life-areas that had been adversely effected by use prior to admission? Which changes do people regard as important in their own lives?

6) What do clients do differently now? How have they changed the conduct of their lives? Are they doing what the program taught them, or what the program wanted them to do? Did clients follow through with referrals? Why not? What sort of referral could have been better? Do clients use additional services after treatment?

7) How do different subgroups of the program's clientele compare in terms of outcomes and perceptions of the program? Are there differences between those who leave without approval and those who leave with approval? How do previous service histories and varied backgrounds affect peoples perceptions of the program?

8) Do clients feel that any changes can be attributed to the program? How helpful was their experience with the program?

AN EXAMPLE

An outcome area that most chemical dependency programs are interested in measuring is "pattern of chemical use." In designing the instruments for the demonstration project with residential treatment programs, this area was broken down into five areas, which together assess "pattern of chemical use."

These five are:

1) Consumption
2) Change in consumption since before treatment
3) Time since last use (or length of sobriety)
4) Presence (or absence) of signs of pathological use
5) Change in perceived harmfulness of use since before treatment

The following sections describe how each of these areas were assessed, along with a number of observations concerning the design features of each of the measures.

Consumption

The following questions could be used to measure the extent of present levels of chemical consumption:

a) In the last month, how often have you drunk alcohol (beer, wine, liquor)?

1 = not at all 2 = less than once a week 3 = 1-4 days/week

4 = 5-7 days/week

b) In the last month, how often have you used marijuana or hashish?

1 = not at all 2 = less than once a week 3 = 1-4 days/week

4 = 5-7 days/week

c) In the last month, how often have you used tranquilizers, pain killers, or barbiturates?

1 = not at all 2 = less than once a week 3 = 1-4 days/week

4 = 5-7 days/week

d) Etc., using other chemicals or groups of chemicals.

Using these measures, one could calculate use (or non-use) from various substances, in the last month. Using "the last month" as the reference point has the advantage of being a standard unit of time that can be measured for everyone, and is not confounded by the length of time people have been out of the program. That is, use rates could be calculated for different subsamples of people, such as those who have been out for one year versus those who have been out for two years.

The choice of which chemicals to include, or to group together, should be made with the programs clientele in mind. Some programs may wish to assess the different opiate derivatives separately; others could combine them. Programs for youth may want to emphasize different chemicals (inhalents,PCP) than programs for elderly (sedatives, pain killers).

This procedure assumes that most of what is called "consumption" can be assessed simply by "number of occasions of use in a week", asked for different chemicals. Number of occasions of use in a week is probably estimated by people more reliably than amount of alcohol consumed; in addition, amount consumed is difficult to interpret, since effective dosages vary so much between people.

Change in consumption since before treatment

It is one thing to know present chemical consumption levels. It is another to know how this has changed since before treatment. Questions paralleling present use could be asked, as follows:

a) Is this (use of alcohol) in the last month less, the same, or more than before treatment?

1 = less 2 = same 3 = more

b) Is this (use of marijuana or hashish) less, the same, or more than before treatment?

1 = less 2 = same 3 = more

With these questions, one can learn change in consumption for each chemical or group of chemicals. These questions also illustrate the use of a dimensional continuum for recording answers, with three gradations; more than three might be difficult for clients to estimate reliably.

Time since last use

Programs often want to know the length of a person's sobriety. This can be measured by asking for the time since last use of various substances:

a) How long ago was the last time you had a drink of alcohol? (use code)

b) How long ago was the last time you used marijuana or hashish? (use code)

c) Etcetera, for other chemicals or groups of chemicals

Code: 0 = never used
1 = less than 1 week ago
2 = 1-4 weeks ago
3 = 1-3 months ago
4 = 3-6 months ago
5 = 6-12 months ago
6 = 1-2 years ago
7 = 2-3 years ago
8 = 3-4 years ago
9 = 4+ years ago

An abstinent rate could be calculated with these questions. The program could decide which chemicals belong on the list of chemicals that program clients must abstain from, and decide how long a time period is necessary before it would confer the status of "abstinent" on someone; it would then count the number of people surpassing that standard. For example, if the program decides that non-use of alcohol, tranquilizers, and caffeine for two years is what defines "abstinent", one has merely to count the number of respondents (assuming they fairly represent program clients) whose last use of alcohol, tranquilizers, and nicotine was more than two years ago. To analyze this question meaningfully, rates should be calculated separately for those people out of the program for one year, for two years, etc.

Presence (or absence) of signs of pathological use

Questions appearing on various "diagnostic checklists" of chemical dependency are used to assess the level of pathological use in those people who are using intoxicating chemicals at the time of admission. Presumably, if these signs are no longer present, recovery from chemical dependency is indicated. The validity of self-report on pathological signs may be questionable, so these answers should be taken as the "lower limit" of the probable incidence.

Examples are:

Sometimes, when you start drinking (or using), is it difficult to stop before becoming completely drunk (or loaded)? 1 = yes 2 = no

Sometimes do you keep on drinking (or using) after you have promised yourself not to? 1 = yes 2 = no

Do you ever wake up unable to remember what you've done the night before? 1 = yes 2 = no

Do you ever have a drink (or take a pill, or smoke dope) first thing in the morning? 1 = yes 2 = no

Are you worried or concerned about your drinking or use of other drugs? 1 = yes 2 = no

These examples also illustrate the difficulty of adapting questions designed for alcohol consumption to other drugs. These questions were taken from a previous study, so that they could be used to compare response rates.

The questions were developed using a pathological population, with Jellinek's methods, and are somewhat questionable as predictors of chemical dependency. A question which does not assume that one person's pattern of pathology is the same as another's, asks:

"We would like to know if you have gotten drunk or loaded in the last month. We're not asking is you were "feeling good", we're asking if you got drunk or loaded more than you probably should? How many times in the last month?"____

Change in perceived responsibility of use

For those people now using chemicals, it would be helpful to know their own perception of whether use is now more or less responsible than before treatment. The following questions might be useful:

a) "If you're now using, would you say that your use has become more or less responsible since the time you went to the program? By more responsible we mean has it become less dangerous or bothersome to yourself or to others; less responsible means it has become more dangerous or bothersome to yourself or to others.

1 = more responsible (less dangerous or bothersome)
2 = less responsible (more dangerous or bothersome)
3 = Same

b) "If you say it is more responsible, please tell us all the changes you've made to make your use less dangerous to yourself or others. Please be specific."

The first question has the obvious disadvantage of requiring the client to summarize for all chemical use. The question could be asked for each of several chemicals or groups of chemicals.

The second question should facilitate a list of ways in which people change their use to make it less dangerous. The question was left open-ended, since a predetermined list would contradict the idea that changes in use in the direction of greater health is defined in each individual's case.

In summary, the above measures allow an assessment of "pattern of chemical use" according to several different aspects of that outcome area.

Evaluation Tools and Procedures:
A Handbook for Chemical Dependency Programs

CHAPTER III

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CHAPTER III
STUDY DESIGN: SAMPLING PROCEDURES, CONFIDENTIALITY, & OTHER DATA SOURCES

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Chapters I and II of this Handbook explored the uses of client follow-up studies, and the ways that the content of a follow-up interview or questionnaire could be developed to satisfy the major purpose of assessing client outcomes.

The discussion of this chapter focuses on how the study designer can ...

1) specify the kinds of clients for which the program would like to make outcome statements;
2) take appropriate samples of clients for inclusion in the follow-up study;
3) abide by the data privacy laws in the program's efforts to obtain follow-up information from clients;
4) consider additional sources of data to supplement the self-report of clients.

The first section of the chapter discusses populations and sub-populations of clients, and introduces the distinction between a population and a sample. The second section details a process for sampling clients from the subpopulations within the program. The third section discusses the use of comparison groups to give more meaning to the results of the study.

The fourth section discusses the data privacy laws, and presents the highlights of both the Federal and State regulations, along with

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recommendations for how they might be used to guide follow-up efforts.

The final section presents advantages and disadvantages of supplementing the self-report data with reports by significant others, or with data from official records.

POPULATIONS AND SUBPOPULATIONS OF CLIENTS

Who should be included in the follow-up study sample is a major question. The answer depends on which people the program would like to make outcome statements about, on the degree of certainty needed to discuss "effectiveness", and on whether it is feasible to include them in the study.

Populations and Subpopulations

In ordinary language one speaks of "kinds" of people. In the medical and social sciences one speaks of populations and subpopulations. A population is a collection of people, all identifiable by a common label. Any particular population is defined by naming its unique qualities (Guilford, 1966). Typically, the population a follow-up study would most like to learn about is the "population of people served by a particular program."

The population of people served by a program can be broken down into any number of subpopulations. There is an almost unlimited list of subpopulations that could be identified within the program's total population. One is limited only by imagination and the availability of information about clients.

Most program records allow several kinds of subpopulations to be identified:

1) clients can be subgrouped by demographic data, such as age, sex, or race.

2) subpopulations may be identified by personal resources or life situations: there are these people with intact family and job, people who are unemployed, people in crisis situations, people in good health, etc.

3) subpopulations may be identified by chemical use patterns: clients could be grouped by drug of choice, by types of problems experienced, or by amount of time since abusive use began.

4) subpopulations may be identified by program service history: there are those people who have been in treatment before, who were referred by the courts, or who experienced treatment but not aftercare.

5) subpopulations may be identified by program administration variables: these might include the subpopulation of clients served from 1972 to 1977, elderly people served in the last year, or people admitted in winter rather than summer.

Of course, subpopulations can be identified using combinations of the above, such as "young, unemployed males referred by the court" or "middle-aged women in crisis abusing tranquilizers." Also, any one person can be a member of several different subpopulations, depending on how they are defined.

Again, identification of these groups for follow-up purposes requires either a client record system that describes clients in the ways needed, or a follow-up contact that deliberately asks questions that allow the program to identify subpopulations.

Populations and Samples

In the procedures of research, one rarely has the entire population or subpopulation available for study. Since populations are often very large, or are defined in ways that prevent a researcher from knowing its true size, they have to be studied indirectly. This is usually done by drawing a sample of representatives (people) from that population, and making inferences about the population from the sampled evidence. The field of inferential statistics gives the groundrules for making generalizations about the population, based on evidence calculated from samples.

For example, suppose we want to learn the success rate of Program X in dealing with the subpopulation of young, unemployed males. One could do such a study by taking a sample of the program's past young, unemployed males, determine the outcomes of interest, and calculate the success rate for that sample. One could then use that success rate to generalize to the population of young, unemployed males served by the program, with an appropriate "margin of error" that can be determined on the basis of the sample size. One might also generalize to future samples of young, unemployed males, but only by assuming that the program doesn't change or that "young, unemployed males" do not change in important ways.

Usually, program administrators and researchers would like to be able to make two different kinds of conclusive statements about outcomes in populations:

1) They would like to know the outcomes for the entire population of clients served by a program, and for different subpopulations.

2) They would like to compare the outcomes for two or more subpopulations. For example, they might like to know if outcome rates are greater for women than for men.

In order to make either of these kinds of conclusive statements about populations and subpopulations, one must first take appropriate samples of clients, observe the results for them and then draw conclusions, following the sort of "sampling process" outlined in the next section.

A PROCESS FOR TAKING SAMPLES OF CLIENTS

In order to make conclusions about populations of clients served by a program, a process for sampling clients must be followed. This sampling process involves several steps:

Step 1: Specify the subpopulations for which there is interest in making outcome statements, and define the population that includes all these subpopulations.

Step 2: Specify how representatives of those subpopulations can be identified, where they could be found, and how their cooperation could be obtained.

Step 3: Draw a sample from the population you defined, on whom data will be collected.

Step 4: Collect the data (by interview or questionnaire), and tabulate the results for each person in the total sample.

Step 5: Group the data according to the subpopulations you are interested in, tabulate the results for each sample, and calculate the appropriate statistical test (discussed in Chapter XIII) that allows you to calculate the "margin of error" in your results.

Step 1: Define the population and subpopulations of interest.

Typically, in a program's first effort to assess program outcomes, it will sample from the entire population of those who made contact with the program. Practically speaking, the largest sample one could draw from the population would be those people for whom a client record was completed and filed.

Programs would probably define populations differently, depending on their services. For example, the nature of a client contact with an information and referral agency is different from a contact with a residential treatment program. These two kinds of programs would probably keep different kinds of records, so that the populations to be studied would be defined differently. An I&R agency might study the population of all those provided a referral. A residential treatment program might study the population of all those admitted to the program.

At this stage, one should list the various subpopulations for whom outcomes will be assessed.This list should include any special "target groups" the program intends to serve, whether defined by demographic data, chemical use, life situation, or program service history. The list should also include those groups that could serve as a basis for comparison. For example, outcomes for people who quit the program after the first day may or may not be of central interest, but knowledge of their outcomes certainly helps to give meaning, by comparison, to the outcomes attained by clients who do finish the program.

Step 2: Specify how representatives of those populations can be identified and found.

For each subpopulation to be studied, there must be a way to recognize individual members of that group. If you want to make outcome statements about "young, unemployed males" there must be a way to identify the age, employment status, and sex of each client. Usually this identification comes from the client's file, or from the follow-up contact itself.

Also, there must be a way to locate members of those subpopulations you are interested in. If there is no locator information (address, phone number) then that subpopulation will not be well-represented in the study.

Step 3: Select a sample of people

How large a sample should be selected? For each subpopulation that you want to make outcome statements about, an adequate sample size must be chosen. It might be difficult to get adequate samples of complex subpopulations, such as the subpopulation of alcohol-abusing, first-time-in-treatment white males with intact employment and family.

The rules of statistics tell us that the larger the sample, the better. This is simply because larger samples give more evidence of the population than do smaller samples. In other words, the accuracy of our knowledge of the population improves with evidence taken from larger samples. The average height of a population can be estimated with a smaller "margin of error" if the calculation is based on a sample of 300 than a sample of 30. While larger samples always make for smaller margins of error, a point of diminishing returns is noticed very quickly by statisticians. Very precise estimates can be made with samples of size 120. Satisfactory estimates can be made with samples of size 30. But keep in mind that smaller samples

always make for larger margins of error, so if it is important to be precise in one's estimates, samples should be correspondingly larger.

If one wants to know about outcomes in the population of people in contact with Program X, data from a sample of size 30 could give a reasonable estimate. But, if one wants to break down that population into various subpopulations, 30 is probably not enough. In other words, 30 is needed to give a satisfactory estimate for each population or subpopulation one is interested in. With reliable data, even smaller samples are tolerable.

The size of the sample one can select is obviously limited by the number of people seen by the program in the past. This number does not determine or even suggest how many people should be in the sample, it only determines how many can be in the sample. The number that should be in the sample is governed by the number and variety of subpopulations that you want to study, and the margin of error that is tolerable in the results.

Obviously, the larger the number of clients seen in the past, the greater the opportunity for studying a variety of subpopulations. If the program has seen only 30 clients, it is unlikely that there will be even 10 alcohol-abusing, first-time-in-treatment white males with intact family and employment. With only 30 clients to draw from, very few subpopulations are likely to be found, and outcome results might best be expressed only for the total population.

Suppose the program has seen large numbers of people, and the study design requires that only a portion of these is needed. How should these people be chosen? By far the most preferred procedure is to select people

randomly. A random selection process is one where each eligible person has an equally likely chance of being chosen. This could be accomplished by putting everyone's name into a hat, and choosing the required number while blindfolded. Another option is to consult a "Table of Random Numbers", found in most introductory statistics textbooks.

A random selection process is the kind that will least likely yield a biased sample. If everyone has an equal chance being chosen, then whatever characteristics or qualities exist in the population (including factors that we don't have the foresight to know about) will probably appear in the sample to the same degree they appear in the population. This is especially true if the sample is relatively large.

A large, randomly chosen sample of the population of clients served by a program could inform us of which subpopulations actually are represented in the program's clientele, and to what degree. This is important knowledge, even without collecting outcome data for each of the subpopulations.

It is important to realize that the program will probably not be able to collect data on all the people in the chosen sample. Some people are not locatable, others will refuse to participate and some questionnaires may be returned in unusable form. One should draw an initial sample that is somewhat larger than what is needed, to allow for this attrition.

Some of the reasons for attrition can introduce bias into the results. If people who are unlocatable or who refuse to participate are substantially different from those who are successfully followed-up, then there is a certain bias in the results. Even though the initial selection of the sample

followed a random process, the final collection of data may contain biases. The final sample is always of a population of people who could be found, and who were willing to participate in the study.

If the completion rate of the sample if "low" (an arbitrary figure might be 80%), one should try to determine in what ways the respondents were different from the non-respondents. One should keep records, during the course of the study, of which members of the sample were unlocatable, and which refused to participate. Comparisons could be made of these different subgroups that might inform us of the biases contained in the final sample. If, for example, those who refuse to participate in the study contain a disproportionate number of people who left without approval, we might learn that the study sample is biased in a pro-program direction.

Step 4: Collect the data

Procedures for interviewing, and recording the data will be discussed in subsequent chapters.

Each answer in a person's interview must now be coded for analysis. Precoded questionnaires are the least time-consuming. Open-ended questions will require that categories be developed, and that each person's response be coded according to one of the categories. Considerable labor can be saved if categories are developed on the basis of pretest results, and then printed on the final version of the questionnaire.

Step 5: Group the respondents, calculate outcomes, and the "margin or error"

The data must be grouped according to the subpopulation of interest, and outcome rates calculated for each. Data processing and statistical issues will be discussed in later chapters.

Since a result or outcome rate is probably based on limited information (the sample rather than the entire population), it is likely to be in error to some extent. The size of this error, called by statisticians the "standard error of estimate", will depend mostly on the size of the sample, and partly on the variability within the sample. Larger sample size makes for smaller error, and larger variability within the sample makes for larger error. This will be discussed more fully in Chapter VIII.

MAKING STATEMENTS ABOUT EFFECTIVENESS

The term "effectiveness" is very broad, and means different things to different people. Different administrators give different definitions, and different evaluation researches produce different evaluation designs. There are, apparently, many ways to offer evidence on "the effectiveness" of a program.

The Handbook has so far discussed two of the major ingredients for a systematic look at program effectiveness: outcome measures (Chapter II) and client sampling (in this chapter). The way different subpopulations are chosen for study, and compared to each other on outcomes, determines a good deal about what can be concluded about program effectiveness.

The kind of follow-up study emphasized so far in this Handbook leads to statements expressing the likelihood that each segment of the program's population would experience various desired outcomes. For example, if one found that 60% of the program's clientele were "not using intoxicating chemicals for one year following discharge", this translates into "the probability of this program's clientele not using intoxicating chemicals for

one year following discharge is .6". One could also give the likelihood of this outcome for a variety of identified subpopulations in the program. One learns, in short, how well the program's clientele (and subgroups within that clientele) is likely to do, on a variety of criteria, based on how well it has done in the past.

But knowledge of outcome rates for clients is not exactly the same as knowledge of the effect the program has on clients. We would not know, for example, outcome rates for people with the same health or pathology at admission but who receive different program services, or no program services. Since many people solve their chemical use problem without benefit of a program, it is important to know what difference it makes whether one uses a program's services or not. It is exactly this difference that defines "the effect" of a program on a given population; at least, that is the way the term is used in scientific research.

Answering the question scientifically, "Does this program have an effect?" is deceptively difficult to do. It ordinarily requires use of the classical experimental design, an ideal approach which is hardly ever seen outside of a laboratory or very controlled setting. This approach requires a "treatment group" and a "control group." These two groups should be as alike as possible in all ways that could otherwise effect the results (same history, same present circumstances, same genes). If the two groups are entirely comparable, and if one group receives the program and the other group does not receive the program, then the difference in outcome between the two groups is an estimate of the impact of treatment on that population.

If the two groups are not entirely comparable, the estimate of the impact of treatment becomes more in error. If the groups are very dissimilar in their pre-program makeup, differences in outcomes can possibly be explained better by these pre-existing differences than by program impact.

In many ways, making a study scientific is at cross-purposes with making it practically useful. To answer the scientific question ("Does this program have an effect?") requires tremendous control and manipulation by the researcher, to make the comparison groups "equal enough" to measure an effect. It is highly worthwhile to know the outcomes of each major segment of the program's population, even if different segments cannot be properly compared with each other to produce an estimate of cause-and-effect. Program re-design is facilitated by knowing the outcomes for different groups of clients.

Still, making comparisons is an important evaluation process, whether it's assessment of change, impact, or effectiveness. Knowing that an abstinence rate is 30% for females has greater meaning if we also discover that the abstinence rate for males is 60%. The magnitude of an outcome rate for a particular group of people takes on more meaning if we can compare it to another one.

In a study where there are a variety of client subpopulations, a variety of treatment processes, a variety of outcomes of interest, and assessment at two or more points in time, there are several kinds of comparisons a program might want to make, all of which contribute to an understanding of program effectiveness.

1) One could compare two kinds of clients on a particular outcome. The subpopulation of alcohol abusers could be compared to the subpopulation of barbiturate abusers on an outcome of non-use after one year.

2) One could compare two kinds of treatment or two program components in their ability to yield a particular outcome. The subpopulation of those participating in aftercare could be compared to the subpopulation of those not participating in aftercare. Those leaving the program after 15 days could be compared with those leaving after 30.

3) One could compare a single subpopulation against two different outcomes. The subpopulation of young males could be compared on an outcome of improved family relations and improved employment situation. With good intake data, one could learn which areas of peoples' lives are most impacted by program services.

4) Various combinations of the above could be formed and compared. Young males leaving the program after 15 days could be compared with young males leaving the program after 30 days.

5) One could make comparisons at two different points in time. Any of the types of groups above could be assessed at admission and discharge, admission and follow-up, or at two different occasions of follow-up.

Furthermore, one is not at all limited to comparisons of only two groups at a time. Statistical procedures are available to compare any number of groups at a time on a given outcome.

There are a few cautions to be observed in making group comparisons, and they concern the issue of the actual comparability of the groups. If we want to compare males and females on a particular outcome, we cannot say that differences in the outcome are "sex differences" unless we know that the

two groups are alike in other important respects. If the group of males are primarily alcohol abusers, and the group of females are primarily tranquilizer abusers, then drug-of-choice is "confounded" with sex. That is, the effect of drug-of-choice is inseparable from the effect of sex. One could "control for" drug-of-choice by making sure that the two groups have the same proportion of alcohol-to-tranquilizer abusers. This technique, called "matching," has the disadvantage of possibly creating other, unforeseen differences between the male and female groups. Possibly the best solution is not to claim "sex differences" in program effect, and instead to simply report the outcomes of the two groups.

Another common example of non-comparability of groups happens when one group is compared at two points in time, say at three months and six months after discharge. It often happens that the number of people successfully followed-up at three months is considerably more than at six months. The 6-month group could look exceptionally good if it's the "poor outcome" cases that drop out. In this case, it would be a serious mistake to conclude that "outcomes improve 3 to 6 months after discharge."

CONFIDENTIALITY AND PRIVACY

One of the factors affecting the availability of clients for follow-up is the rules and regulations governing the confidentiality of alcohol and drug records and the privacy of people.

Regulation is needed to minimize the possibility of disclosure of potentially damaging information. Disclosure or misuse of information could result in embarrassment, lost opportunities, or other forms of psychological or social injury. The risk of these unfortunate consequences comes from the

fact that there is still stigma attached to the diagnosis or treatment of chemical dependency, and that clients' records might contain statements of illegal drug use, criminal behavior, and feelings and values disclosed in the context of privacy and trust.

Confidentiality and privacy guidelines and statutes govern access to records. Access to records is needed to get access to clients, since client locator information like address and phone number are contained in program records.

Records also contain client description data and program service data, which are needed to describe client populations and subpopulations, to form comparison groups, or to form baseline data.

Federal Regulations

The Federal regulations are contained in "Confidentiality of Alcohol and Drug Abuse Records," originally published in the Federal Register, Volume 40, July 1, 1975, pages 27801-27821. They make up Part 2 of Title 42 of the Code of Federal Regulations. A self-paced programmed instruction course on these regulations was published by the National Institute on Drug Abuse, and is available from the Chemical Dependency Programs Division of the Minnesota Department of Public Welfare.

The following are highlights of the Federal regulations:

-- They are concerned with alcohol and drug records, and not any other kind of governmental or official records.

-- They claim to present only the minimum requirements for the protection of confidential records.

-- They address the concerns of evaluation, by openly struggling with two streams of legal thought and social policy, one dealing with enhancing the quality of treatment opportunities, the other concerned with the interests of citizens as patients, most particularly in regard to protecting their rights of privacy.

-- They are supportive of research, audit, and evaluation, even without prior consent of the client: "...the content of records pertaining to any patient...may be disclosed, whether or not the patient gives consent, to qualified personnel for the purpose of conducting scientific research, management audits, financial audits, or program evaluation but such personnel may not identify, directly or indirectly, any individual patient in any report of such research, audit, or evaluation, or otherwise disclose patient identities in any manner." Getting informed prior consent of clients is not necessary, according to these Federal guidelines, since the risk of embarrassment or harm to the client from a follow-up contact is minimal (provided that only the program and client and not any third party is involved, deliberately or undeliberately).

-- They defer to the State, when the State has privacy regulations that are more strict than the Federal regulations. Minnesota's Data Privacy Act is more strict, so it takes precedence.

Minnesota Regulations

There are two important Minnesota documents. One is the Minnesota Data Privacy Act, with 1978 amendments (Minnesota Statutes 15.162-15.1671), concerning "official records collection, security and dissemination of data."

The other is the proposed administrative rule, which if made official, defines terms used in the Act, establishes procedures concerning collection, use and dissemination of data on individuals, and defines duties of state and local officials who are responsible for data on individuals. Both documents are available from the Data Privacy Unit of the Minnesota Department of Administration.

The following highlight the State's regulations:

-- They govern all official records, not just alcohol and drug records.

-- They are concerned primarily with specifying the groundrules by which official records are kept open or closed to the public, to the subjects of the records, and to government agencies.

-- They state that "private or confidential data on individuals shall not be used, collected, stored or disseminated for any purposes other than those stated to an individual at the time of collection..."

-- By an emergency action taken by the Commissioner of Administration, using a procedure made legal by the Data Privacy Act, all alcohol and drug records maintained by the Welfare system are classified as "private." This classification remains in effect until June 30, 1979, at which time it can be renewed.

-- "Private data on individuals" means data which are not accessible by the public, but which are accessible to the individual subject of that data.

-- "Data on individuals" includes all records, files and processes which contain any data in which an individual is or can be identified and which are retained or intended to be retained on a permanent or temporary basis.

-- The proposed rule also maintains that code numbers representing unique individuals in certain data constitute "data on individuals," provided

a list or index is made available by which the code number can be cross-referenced to identify unique individuals.

-- The law states that "an individual asked to supply private or confidential data concerning himself shall be informed of: (a) the purpose and intended use of the requested data within the collecting state agency, political subdivision or statewide system; (b) whether he may refuse or is legally required to supply the requested data; (c) any known consequence arising from his supplying or refusing to supply private or confidential data; and (d) the identity of other persons or entities authorized by state or federal law to receive the data."

The Privacy Act and the accompanying administrative rule suggest to us the following recommendations and observations:

1) The program should inform the client at admission (or at any other time when personally-identifying information is recorded) of all the ways that client data will be used, and who will see it. This applies to all uses of data, including those internal to the program (case management, referral, billing, mailing of newsletters).

2) Getting a signed statement from the client to the effect he/she has been informed of his/her rights of privacy and the ways in which the program was ensuring it, is not required by the law, but it would give good evidence of compliance with the law. Another permissible, but less effective, practice might be to show that informing clients of their rights to privacy is standard program policy, perhaps by printing the information and guarantees of privacy on top of each form on which the client gives personally-identifying information. Questions of legal access to chemical dependency program clients

and client data should be directed to the Attorney General's office in the State Department of Public Welfare.

3) Informing the client at the beginning of the program (and reminding him/her again at the end) of the possibility that their name and address might be used to make contact for a follow-up interview is in keeping with the law. It has other advantages as well. It creates the expectation among clients that there will be a follow-up. It also provides an opportunity to ask for good client locator information. You could ask where the client could be reached in six months by phone, or by mail. You could ask for "safe" places to make contact with the client. It might be helpful to show the client the letterhead stationery on which the questionnaire (or any mail) might arrive, so the client will recognize it, especially if it would come from a source other than the program itself.

4) Access to private files by third parties (research organizations, insurers, consultants, friends, and anyone else outside the client/program transaction) is illegal without the prior consent of the subjects of those files. It would have to be the program's staff that would make the first follow-up contact with the client. Staff could ask the client's cooperation in a follow-up study, and then schedule an interview with the program or a permitted third party. Or, the client could be asked to send in a form giving permission to be interviewed, and an address or phone number to contact.

5) Even if a client had not been told at admission of the possibility of a follow-up contact, it could be argued that the program has the right to make contact with its own former clients. Whether it is an invasion of privacy to make this contact has not been clearly stated. For a program to request a former client's participation in a follow-up study is not by itself

a betrayal of confidentiality, although the program must take care not to make itself obvious to others in its search for former clients.

6) While it is not at all clear from the regulations whether the follow-up interview itself is an "official record," it is probably best to regard it as "private data on individuals," even if a client's identity is not involved. This means that one must inform the client, at follow-up, of the uses to which the follow-up data will be put, and who will see it.

7) Any program or administrative unit is permitted to provide summaries of data, and to make them public, even when derived from private data on individuals. These summaries, of course, must not reveal an individual's identity.

OTHER SOURCES OF DATA

The discussion so far suggests that outcomes would be assessed by anayzing the self-report of the former client. There are two other major sources of data: report by a "significant other" to the client, and official records.

"Significant Other"

A major reason for collecting data from a significant other, or any other person known to the client, is to get corroboration of the client's story. It is often said that chemically dependent persons are apt to deny or at least distort certain facts about their lives. This could certainly introduce unreliability into the assessment of outcomes.

For corroborative data to be valuable, we must be assured that the person chosen by the program to corroborate the client's story actually knows,

and is willing to tell, the truth. For certain questions of fact this might be true (such as whether the person is employed, or receiving public assistance). But other, more personal questions might not be accurately known to the corroborator.

Recent evidence (McCrady and others, 1978) suggests that client's and spouse's reports of whether or not the client has been drinking tend to agree well, but there is disagreement over estimates of how much drinking.

It is not clear how data from a significant other should be handled. If there is no agreement between client and corroborator how does one reconcile the two into a single summary? While consulting a significant other is no doubt useful as aftercare, outreach, or intervention, it is not clear what role it has in follow-up evaluation.

Official records

Some outcome areas can be assessed from official records. One could learn whether the person is collecting unemployment insurance, registered with employment agencies, or caught up in the criminal justice system. There is an amazing amount of information kept in the records of government and the variety of "service delivery systems" available to people.

For these sources to be helpful, we must consider their accuracy, appropriateness, accessibility, and cost. The accuracy of almost all kinds of official records, even though they are "official", is surprisingly low. The most accurate public records are apparently birth records.

The Sobell's (1978), who have done the most to document the reliability of various sources of data on treated alcoholics, conclude that the self-report of most clients is at least as accurate as most official records.

Computerized data is no guarantee of accuracy. Bad data can be made even worse when computerized. Even sophisticated computerized data bases may contain considerable error just from mistakes in coding and keypunching. Other mistakes can occur from bad programming.

Official records may not be altogether appropriate for use in assessing constructive change in behavior. Most records are kept by institutions that are concerned with different kinds of pathology or social deviance, like illness, criminal behavior, or poverty, rather than positive or constructive behavior.

Official records might be useful for corroborating certain events, but one must be assured of the completeness of the records. Here too, disagreements between the client and the record present problems for analysis and summary of the data.

Many official records may not be accessible to you, as governed by the Minnesota Data Privacy Act.

The cost of collecting data from official records may be high, considering the difficulties of securing permission and access, and the time spent attempting to locate all the possible places where your client's name or case might appear.

Reliability and validity of client's own self-report

The Sobell's (1978) have concluded that the validity of alcoholics' self-report data is acceptably high. Some types of report are probably more valid than others. Validity of life history data is high, followed by "non-

alcoholic behavior data" and than "alcoholic behavior data" but all three categories showed enough validity to proceed with evaluation research.

Studies on the validity of self-reported chemical use and chemical behavior often show conflicting results. Armor and his co-workers (1978) found studies to support most positions, and conclude that reliability and validity tend to vary according to the type of alcohol behavior, the type of respondent, and the type of setting.

Since the respondent's need to deny or distort his/her self-report may be in part due to the stress or demands of the interview situation, there is a great deal the follow-up study designer and the interviewer can do to minimize the threatening aspects of the follow-up transaction.

This means giving attention to a) the way the program develops the expectation among clients that a follow-up contact is forthcoming, b) the way the program locates, or attempts to locate, former clients, c) the manner of seeking cooperation from the client, d) the assurances given to the client when informing him/her of rights to privacy, e) finding a safe setting to conduct the interview, f) the content and wording of the questions, and g) the style of the interviewer. These will be discussed in the following three chapters.

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CHAPTER IV

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CHAPTER IV. PLANNING A FOLLOW-UP STUDY: PROCEDURAL AND COST CONSIDERATIONS [1]

by

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Once the objectives of a follow-up study have been determined, a program will need to examine the procedural options that are available. Finding the most effective and economical method for conducting follow-up involves a number of important considerations.

This chapter will consider several procedural arrangements and explore the implications of each with regard to the following issues:

1) ...Comprehensiveness of the study
2) ...Personnel requirements
3) ...Confidentiality precautions
4) ...Financial resources
5) ...Consultation

The decisions to be made vary in complexity. They range from such questions as who should collect the follow-up data to what kind of data collection methods should be used. The purpose of this chapter is to provide a general introduction to these questions and show how each decision can effect the others.

The chapter will also discuss some of the problems in achieving optimal credibility in the investigation of client outcomes and provide an overview of fundamental cost considerations.

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Preparation for follow-up

A follow-up study for some programs might be premature. Programs which are very new or have made recent changes in their services may not have a large enough clientele to sample. For these programs, it may be helpful to begin preparing for future follow-up by designing a preliminary study plan using this chapter as a guideline. The preliminary plan can suggest ways to improve client intake procedures and will facilitate a smoother transition into follow-up when it is more appropriate. Ideally, clients should be informed of plans for follow-up and give their permission to be contacted, prior to receiving services. At that time the client can also be asked for names, addresses and phone numbers of persons who will always know his/her address. This procedure may also increase the probability for including clients in a sample who drop out of the program or discontinue services prematurely. The procedure for presenting client permission statements will be discussed further in Chapter V.

Any program contemplating follow-up should examine its past and present intake practices for compliance to confidentiality regulations and client privacy rights before it attempts to contact former clients. This will enable a program to advise clients of their rights to privacy during the follow-up contact, if they had not been previously informed. (See Chapter III for specific regulations.)

Analyzing the audience and the need for comprehensiveness

An analysis of who will actually use the findings and for what purpose is necessary at the outset of planning. There are many reasons for conducting follow-up, some requiring more comprehensiveness than others. When important decisions will be based on the study findings, it is critical that the study is scientifically sound, (i.e., a random sample, a high completion rate, reliable and valid data, and careful analysis of the data). The need for rigorous research procedures is especially important when the study results will be used to determine such things as requests for funding, staff allocations, or selection and modification of treatment components. For example, if programs are responding to a mandate for comprehensive evaluation from funders or political supporters, a sound research design will need to be developed to provide an extensive report of outcomes.

On the other hand, some programs may discover that they can achieve the same objectives of a study by some other less expensive means. This may be the case when a program intends to use the findings itself, to answer internal programming questions. For example, a treatment program might want to assess outcomes of clients who participated in aftercare services and may have a thorough record keeping system indicating outcome information for each client that has used the aftercare component. An analysis of this outcome data may be sufficient to answer the questions of a follow-up study and consequently save the program from considerable effort and expense of gathering new data.

Another example might be a program that would like to know if more effort should be made to help clients find employment. In such a case, the program decision-makers can define what evidence will be sufficient to answer this question. The evidence needed may not require an extensive questionnaire or a large sample of clients.

Procedures and Contractual Arrangements

The research plan for a follow-up study is discussed in Chapters II and III. This section will discuss a procedural plan needed to implement a study.

The responsibilities and functions of a follow-up study can be broken down into three major phases:

1) ...Planning and coordination
2) ...Data collection
3) ...Analysis and reporting

Programs may conduct the follow-up study themselves through all three phases or contract with an evaluation/research organization to conduct the study. There is also the option of the program providing a substantial part of the work force and contracting with consultants or hiring individuals to do specific functions where more expertise and/or objectivity is needed. There are advantages and disadvantages to each of these approaches, as discussed below.

Developing a procedural plan

The direction of this section is based on the premise that there will be a single follow-up of past clients of a program. The issues discussed will apply in most respects to other follow-up alternatives; however, more complicated strategies, such as ongoing studies will not be addressed specifically.

Assuming a program is ready to look at the procedural options, the first step is to begin to develop a plan for implementing the project, which will include a timetable and budget. The plan will influence the decision whether to do the project within the program independently, whether to have it done by professional researchers, or to select consultants at certain intervals throughout the project.

It is helpful if one person is appointed as director of the study and be given the responsibility to begin drafting the procedural plan. Experience in evaluation and research is desirable for this position, but at a minimum, the person should have an interest in research, a commitment to a quality product, the time to devote to the project, and the willingness to learn evaluation methods from manuals or experienced researchers.

In specific terms, the plan will first consist of defining the study objectives, the audience of the study, the sample and a description of what variables will be measured. The next consideration will be given to methods of data collection and selection of appropriate personnel to perform that function. The third phase concerning data analysis and reporting will be discussed in later chapters.

Follow-up studies vary to such a great extent in goals, methods, and scope, that it is difficult to be specific about costs. The following suggestions are made based on our own and other researchers' experience.

DATA COLLECTION METHODS

Telephone Interviews

The advantages of telephone interviews are that they are generally faster and less expensive. If the calls to clients will be local, there may be only the cost of additional lines or extension phones to be considered. However, phone interviews should not exceed 20 minutes in length (10 minutes is better) and will require a simpler and shorter questionnaire in order to prevent the client from losing interest or becoming distracted in the process. Time constraints with phone interviews will not allow the type of in-depth questioning that can be afforded in a face-to-face interview.

Tracing clients who have been out of the program for a long time will probably result in some out-of-state calls which would require additional long distance cost estimates. If the program clientele is highly transient, a phone interviewing procedure is not likely to produce a high completion rate of the sample. Also, the possibility that some former clients will not have phones will cause them to be lost from the sample, which could bias the findings of the study.

Confidentiality is difficult to insure with telephone interviews and therefore, steps must be taken to prevent information regarding a client's participation in a program from being disclosed to others who may not know. Procedures for protecting client privacy with phone contacts will be discussed further in later chapters.

Mailed Questionnaires

While mailed questionnaires are often considered the least expensive method for getting information from clients, there are greater costs involved than one would imagine.

The first aspect of additional cost is in the design of an effective questionnaire. The clarity, simplicity and attractiveness required of a mailed questionnaire will be enhanced by the knowledge and skill of a professional researcher early in the designing process. Consultation should be sought by a program if a mailed instrument is chosen for use in follow-up.

This method will also require several mailings to those clients who do not respond to the initial request to return the questionnaire. The process of eliciting responses may take as many as 3 or 4 mailings to each non-respondent and will require a questionnaire with each reminder. This means

there will be additional expense for printing two to three times as many questionnaires and a sufficient quantity of persuasive reminder letters. It will also effect postage expense appreciably, as each questionnaire must have a stamped return envelope accompanying it.* Some of the expense can be reduced if copies of all the follow-up documents are printed generously in the beginning of the project, through quantity printing price breaks.

There are additional clerical costs for monitoring returns and mailing reminders persistently to non-responders. In terms of time-loss, delays are bound to be frequent in the completion of a mailed survey.

Many mail follow-up studies produce less than satisfactory return rates, but this is usually due to the lack of design knowledge and rigorous follow-through procedures that are necessary for better results.

Taking into account that a mailed instrument is one-way communication, there may be some problems with the analysis of the collected data. Even if designed well to permit the least amount of misunderstanding, questionnaire items can still be incorrectly answered or inadvertantly missed by respondents. The occurrence of missed items, in combination with a poor response rate, could cause some analysis to be impossible, or at least inadequate for drawing any inferences from the collected data.

Careful consideration must be given to mailed questionnaires to assure confidentiality. Maintaining privacy through the mail suggests that no reference is made to alcohol or other drug treatment, either in the return address on the envelope or in the content of the initial correspondence to clients asking for the participation in the study. A neutral agency name, or neutral research project title should be used to identify the follow-up study. Samples of introductory letters will be furnished in later chapers.

*Previous research has shown that the return rate of mailed questionnaires increases dramatically when a self-addressed stamped envelope is enclosed with the questionnaires.

In-person interviews

Face-to-face interviewing has several advantages: it permits better confidentiality and privacy; it gives assurance of interviewing the right person; it allows more in-depth questioning; it facilitates clarification when questions or answers are unclear; and it permits more elaboration of answers from respondents. However, it is the most costly method of collecting data in terms of time and money. The actual expense will depend on the size of the sample, the amount of time to conduct the study, the ease in locating clients, the length of the interview, the extent of training provided to interviewers and the compensation agreements between interviewers and programs.

Travel expense. The interviewer will need a car and mileage allowance to facilitate interviewing those clients who do not have transportation or prefer to be interviewed in their homes. If the program serves a rural area or if clients have moved out of the locale of the agency, travel costs will be somewhat greater.

Administrative and office expense. If clients are asked to meet with the interviewer at the program or some other office, consideration needs to be given to providing these facilities. Office space for contacting and interviewing clients should include phone, easy accessibility, privacy and a neutral atmosphere.

If a program decides to hire interviewers, salary and other benefits such as insurance, tax withholding and overtime must be negotiated. Paying an interviewer by "completed interview" is complicated by issues of client accessibility and quality control, and is not recommended. Well supervised interviewers will work as efficiently on a salary or hourly rate.

The responsibility of recruiting, training and supervising interviewers, regardless of their number, needs careful attention. A program will want to delegate these responsibilities to one or more people who have ample time, sufficient skill and good accessibility throughout the project. The use of professional research organization may be seriously considered for performing these functions, particularly in large studies where the management of interviewers and data collection is time consuming and complicated.

If the program will use its existing staff to perform the interviewing function, the major cost will be the time its own staff devote to the project. But if the sample size is large and the time to complete the study is a constraining factor, there may be a need to bring in other people to assist in the interviewing.

WHO SHOULD DO THE INTERVIEWING

Another aspect of in-person interviews is the issue of selecting appropriate people to conduct them. Objectivity, availability, assertiveness and interviewing skills are the essential requirements for good interviewers. Beyond these basic requirements, there are other considerations for appropriateness. The credibility of the study, confidentiality concerns, and cost are reasons why a program will need to examine the following discussion carefully, to determine if existing staff, hired personnel or a research organization can provide the best interviewers for the project.

Using existing program staff

Using existing program staff, such as counselors, has some advantages. In certain programs, it is likely that the staff would have more success in locating former clients and scheduling an interview with them than would an outside researcher.

If counselors of a program were assigned to follow-up their clients, their knowledge of the clients' histories would also provide a check on the information that is given. This type of validity check would not be available to outside interviewers, unless history information was provided to them in summary prior to the interview.

In addition to staff's familiarity with clients, they would also have prior knowledge of the record keeping system and generally will have less trouble interpreting and transferring correct information on clients. If hired interviewers are used, it will be necessary to provide orientation to familiarize them with the record keeping system, client population and philosophy of the program.

Using program staff has the main advantage of ease and simplicity in dealing with confidentiality requirements. These requirements make follow-up less complicated when only two parties are involved, the program and the client. Essentially, the program has the right to access its own files to compile client locator information and contact clients to request their participation in follow-up. A third party, such as an employee of a research organization, does not have the right to access the program's client files without the prior consent of the client.*

The job of retrieving information from the files, updating addresses, and locating clients can probably be done less expensively by the existing program staff. If previous client consent has not been obtained for follow-up, it will be necessary to use employees of the program for the initial contact to obtain permission. This may be done by mail or phone.

*There is some question as to who constitutes a "third party". For example, a program managed entirely by an Area Board (as a fiscal affiliate) is contractually linked to that Board. Therefore, a Board employee apparently has the right to access the program's files. It is highly advisable for a program to get an opinion or consultation from the State's Attorney General attached to the Department of Public Welfare, regarding the "Minnesota Data Privacy Act", if it is in doubt about access to program files.

The use of existing program staff as interviewers has several disadvantages that need consideration.

The first consideration is whether former clients would be as honest with staff interviewers as they would with someone they did not know or associate with the program prior to the interview. There is the distinct possibility that clients will wish to please staff interviewers that they know and who may have had an impact on their lives. This could lead to positive responses that are influenced more by the situation than by the truth.

The second consideration is the potential feeling of threat to staff. If the study findings will be used to determine directly or indirectly the future staffing of a program or effect the program's reputation, it is unrealistic to expect the program staff to be fully objective in collecting data.

Beyond the fear of losing one's job, there are more subtle threats that may affect staff objectivity as interviewers. Most therapists or counselors are convinced there is value in the work they do, in spite of the frustrations and disappointments that they face on a daily basis. They may find it difficult to accept that not as many people were helped as they had hoped. Therapists also risk learning that former clients have been helped more effectively by some other treatment or no treatment, which may cause them to feel that they have been wasting their time as "helpers".

In many programs there may be no risk of deliberate distortion of the findings by its staff, but there will always be the risk of unconscious or seemingly innocent efforts to manipulate the findings. This unconscious bias can manifest itself in a number of ways. Staff could be selective in their efforts to contact clients, putting more energy into locating

those clients that will give positive outcomes and/or passively dealing with those clients that may be negative towards the program. As a result, the interviewed sample of the program's clientele will be biased.

Bias may also surface in the interview itself, particularly if the staff interviewer records responses to open-ended questions. It is likely that more elaboration will be elicited and recorded for positive comments than negative comments.

When an interviewer stands to gain or lose from the findings, for whatever reason, the question should be raised whether that person is appropriate to collect data. The use of outside interviewers will maximize objectivity and should be given careful consideration.

Furthermore, if a former client feels some threat of repercussion from a program to negative comments, he/she will not want to share them with a staff interviewer that may expose his/her identity. The use of an outside interviewer would allow former clients to feel more certain that their identity will not be learned by the program.

Another disadvantage is that, even though staff are often very willing to help in evaluation, their availability for contacting and interviewing clients in a follow-up project may be difficult to arrange and coordinate. If staff are utilized to a maximum capacity for program duties and then expected to take on the additional job of follow-up, it is likely the additional tasks will be executed poorly, inconsistantly, or not at all. There may also be implications of poor staff morale under this type of pressure.

Minimizing risks of bias

If it is not possible to hire outside interviewers due to cost or lack of resources, there are some ways to minimize these risks of subjectivity.

The interview itself may be designed to facilitate more objective information gathering (e.g., more structured, closed-ended questions), thus making it less susceptible to interviewer bias. However, even with a carefully designed questionnaire, the delivery of the same question, depending on the tone of voice or non-verbal cues, can elicit quite different responses.

Another way of minimizing the risks of subjectivity and over-extension of staff would be to select personnel who have had the least contact with clients, possibly the administrative staff, interns or volunteers. These people may be more easily rescheduled to allow for the additional work. Candidates for the role of interviewer should be examined to see who has the least stake in the findings, both personally and professionally.

The nature of the audience will also be a consideration. If data are being collected for a funding agency or legislative body, the use of the program's own staff as collectors becomes more questionable. It is likely that the public and funders will have greater confidence in the objectivity of an independent researcher than they would in the program's own assessment of outcomes.

Hiring additional staff as interviewers

Hiring a person outside of the program is a compromise between using the existing staff and contracting with a research organization to conduct the interviews. This arrangement has the advantage of complying simply with the confidentiality regulations, since the new staff person would have legal access to client files.

The major advantage is that a less biased person could be hired to do the data collection and is apt to do the job more effectively due to a clearly defined role within the program.

This arrangement may have the disadvantage of former clients perceiving the interviewer as an agent of the program, which could affect the client's decision to be candid. However, the association would have less influence on a client than would his/her former counselor.

Interviewer training will be necessary regardless of the arrangements. The extent and focus of this training will depend a great deal on the comprehensiveness of the study and the qualifications of the interviewers.

There is also the issue of cost; hiring an interviewer will obviously mean adding him/her to the program's payroll.

Contracting for interviewers through a research organization

A professional research organization may be contracted to conduct the study and/or provide interviewers. This arrangement would present the greatest possibility for objectivity, since the interviewers would not have a stake in the findings. Former clients may also respond more accurately to these interviewers who are seen as "neutral", thus lending more credibility to the findings.

One of the major disadvantages in this type of arrangement is that it will be the most expensive approach.

Another disadvantage is the problem of access to records for a third party. One solution, as mentioned earlier, is to inform clients at admission of the follow-up project and obtain permission from them to be contacted

by the research group. However, this must be done well in advance of the study and there is still the likelihood that not all the clients will give permission at intake.

Another solution is for program personnel to make the initial contact with clients requesting their participation in follow-up. While this arrangement falls within the confidentiality guidelines, it could lead to a biased sample, if the program is selective of the people to be interviewed. The research group under contract should have the authority to monitor the random sampling procedure, without jeopardizing confidentiality.

DEVELOPING A TIMETABLE AND BUDGET

After consideration has been given to methods and personnel, the procedural plan will need to contain estimates of time and costs in the form of a timetable and budget.

Planning a timetable

It is essential that a written plan is used as a guide to developing a timetable, stating target dates for each phase of the study. The following tasks must be included in the time estimates.*

1) ...Selecting the sample
2) ...Developing the questionnaire
3) ...Training interviewers
4) ...Compiling locator information
5) ...Conducting a pilot test
6) ...Locating clients and scheduling interviews
7) ...Conducting interviews
8) ...Editing and coding collected data
9) ...Keypunching and verifying
10) ...Analyzing the data
11) ...Preparing the report

*The above list is applicable to studies using in-person interviews and computer analysis.

A time estimate for each phase, even if inaccurate, will have value for a number of reasons. It will allow the program to estimate how long it will take to complete the project, it will lead to a list of all the tasks that are to be performed, and will provide a base for discussion on how the tasks will be executed. It will also highlight the areas where consultation and special training will be needed.

Once the project is underway, the timetable will help the project director identify problems when delays arise and give assistance in keeping the study on track. A good rule of thumb is that each step will require more time than one would expect.

Locating clients. The time it takes to do the actual interviewing will usually be much less than the time required to locate clients and arrange for the interview. A pilot study will provide a base for time estimates related to tracking clients. (Chapter V will discuss the procedure of a pilot study.)

If a completion rate of 85% or more of the sample is sought, the methods for locating clients become painstakingly thorough. It will obviously take longer to locate those clients who have moved. The time requirement for locating clients will be correspondingly greater for each year the client has been out of the program.

Planning a budget

The greatest expense of a follow-up study will be absorbed by personnel regardless of the contractual options chosen. A breakdown of all the tasks to be performed and the length of time allowed for each task will give structure to the budget in terms of person-hours required.

If the program's existing staff is used in the project, even without additional payment for their services, it will involve hidden costs. Diverting staff from their regular duties will mean the program will have to decide how those duties will be taken care of in their absence.

An evaluation of person-hours may lead to the realization that the follow-up project is too ambitious and will require a scaling-down due to personnel shortages. It is much better if this scaling down occurs in the

planning stages of a study, as opposed to drastically reducing efforts or abandoning the study later in the project. An untimely decision to reduce efforts would obviously lead to considerable waste and/or reduce the usefulness of the study findings.

Other follow-up expense

Clerical costs. Maintaining records on attempts to find and interview clients, and to edit the collected data, take a great deal of time. These tasks may be shared by the coordinator, staff and interviewers, or may be the interviewers responsibility alone.

Paying respondents. Many studies have successfully included payments to clients for granting an interview. A general rule, however, is to make the amount small enough to be feasible and yet large enough to give the client a sense of responsibility or obligation to follow through with the interview. The range of payments could be anywhere from a quarter enclosed with a mailed questionnaire to $5.00 for an in-person interview.

Another way to compensate clients, is to pay for their travel expense (cab, bus, or mileage) when they agree to meet at the interviewer's office for an in-person interview.

For some programs, it may seem extravagant to consider this type of payment, but a high completion rate of the sample will be of great importance. If not achieved, it could significantly reduce the scientific value of the findings.

Table 1, on the next page, outlines various cost items which must be considered when constructing a budget. When the best possible estimates have been made, the program should be aware that unforseen events may increase the costs. The study should not be approved unless there are sufficient funds to cover the entire project.

TABLE 1

Follow-Up Costs To Be Considered

Personnel Expense

Research director/coordinator

Staff or other personnel for:

- Search of agency records
- Contacting clients
- Interviewing
- Monitoring data collection
- Coding collected data
- Keypunching
- Data processing

- Final report production
- Secretarial support

Consultants

Materials and Interviewing Expense

Printing and duplicating:

- Questionnaires
- Stationery, post-cards
- Return envelopes (if any)
- Xeroxing (letters, tables, etc.)
- Final report

Postage
Telephone
Computer time
Office supplies
Travel expense (interviewers and/or clients)

Payment to respondents (if any)

Office space (if necessary)

Adjusting the study to resources available. The value of the expected findings should be weighed carefully once the cost of the study is estimated. When the evaluation funds are not adequate to support the original study plan, revisions may be made to reduce the study objectives to a more specific area of effectiveness, and/or a smaller sample can be drawn.

Resources for follow-up. Evaluation monies are sometimes available through the Minnesota Department of Public Welfare, Area Mental Health Boards, or foundations.

Contracting with outside research groups

If an outside research group is chosen, there may be several advantages in joining with one or more similar programs in the area for the purchase of research services. The costs of developing interviews and procedures could be shared by the programs, and assuming they are compatible modalities, the programs would have other outcome data with which to compare their own results.

When contracting the entire study to an outside research organization, a written contract must be established. Such a contract must specify the costs, time schedule, responsibilities of each party, ownership of the data, and the final product. It should also be stated that the questionnaires, computer cards and data tapes be turned over to the program when the contract is completed. This way a program would have the capability to reanalyze the data or perform further analysis at a later date. If the same clients are to be followed-up at some point in the future, the program will also want copies of the locating and interviewing records, with the key so that clients can be recontacted.

Another issue to be made clear at the outset are the publishing rights of the contractor, whether they may publish independently from the program's data and/or identify the program with the findings.

Consultants

The use of consultants may be appropriate at almost any stage of the study. However, a day of a consultant's time can cost well over a hundred dollars and it behooves a program to get as much as possible from that time. A program can expect to get significant help from a consultant if its questions are thoughtfully formulated and specific.

There is a point where consultation becomes especially important, and that is when the research plan has been developed in writing and is being considered for approval. A consultant can review the plan for flaws in design from a technical perspective. The review can also suggest how expenses can be reduced, how efficiency can be increased and how realistic the projected costs appear. A consultant can also review the plan for legal or ethical problems with regard to confidentiality. The laws are quite complex and they are continually changing. The ethical requirements lend themselves to varied interpretations and unless a program is completely familiar with them, it is wise to get consultation in this area.

If a program is considering a contract with a professional research organization, consultation may be advisable for finding an appropriate contractor. There are special problems associated with selection of a contractor, but the cost of a consultant for this will be minor compared to the cost of the contract itself.

Another area where consultation is especially valuable is in the final reporting stage of the study. Once a draft is prepared, an opinion from a professional researcher can be sought with regard to the analysis and the conclusions that are made in the report.

The number of evaluation specialists and researchers is increasing, and there are some who have had relevant experience in the area of chemical dependency programs or similar social-health service programs. Others may not be familiar with chemical dependency as such, but are experts in research design and have experience in studies of other populations.

Information on potential consultants can be found in professional institutes for survey research, in universities, in some funding agencies, and in the Single State Agency's Planning, Research and Evaluation Section.

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CHAPTER V. Planning A Follow-up Study: Operating Procedures[1]

by

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Chapter IV discussed several procedural arrangements for follow-up. Each procedural option involves two essential tasks: finding the subjects of the study, and gaining their cooperation to participate in the project. Since these tasks will absorb a large portion of the time, effort, and money that is spent on the project, it is important to develop a comprehensive strategy for this phase of the study.

This chapter will consider operational procedures of follow-up with regard to the following steps:

1) ... Compiling records for administering the study.

2) ... Locating clients from available resources.

3) ... Informing clients of the study to gain their cooperation.

4) ... Pretesting the study procedures.

The next chapter will provide methods for coordinating and monitoring the data collection process and will discuss the qualifications and training of interviewers.

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[1]This chapter of "Evaluation Tools and Procedures" was prepared under Contract #29055-29056 with the State of Minnesota, Department of Public Welfare.

DEVELOPING RECORDS FOR FOLLOW-UP

Reviewing agency records

As mentioned in earlier chapters, one of the initial steps for follow-up is the careful review of the program's client records. This review is done early in the planning stages to determine what client information is available.

An examination of the records will reveal the possible ways of defining subgroups, and will also provide an estimate of the difficulty in locating clients from the addresses provided. While this examination will point out limitations for the present follow-up project, it may also lead to improvements in record keeping for future studies.

Administrative and research records

Once the research plan has been approved, it will be necessary for the follow-up director/coordinator to develop several sets of records that are essential for effective study management.

List of clients. The first document required is a complete list of all the clients who are eligible for the sample, with a written description of how eligibility is defined.

The list of clients may be either by name or by program client number. It is from this list that a special study number will be given to each client. The numbers should begin with 001, 002, 003, and so on, using enough zeros so that all numbers on the list have the same number of digits. When all of the clients have been assigned a study number, the list of clients should be kept by the study coordinator to ensure its safety from loss or damage. This list is what is known as a "client identifier key."

The procedure of assigning new numbers to the potential study group permits better data privacy.[2] All of the collected data should be identified by the client's study number, and separated from any personally identifying data. Only the staff contacting and interviewing the sample will know the clients' names. The special study number will also assist in the random selection process if a random number table is used.

The same type of list is necessary for identifying control or comparison groups if these are used. A clear record should also be kept of exactly how each sample was drawn from its population.

Consideration for repeaters in sampling procedure. Some programs may decide to sample from their entire list of admits for a given period of time in a follow-up study. This type of sample poses the problem of dealing with individuals who have been admitted to the program more than once during the designated time period. The objective will be to eliminate duplicate admits from the selected sample for follow-up.

Procedures may vary from program to program, but generally a file is established the first time an individual is admitted to a program. Also, the admission is usually entered in a log by date, using either the client's name, or a client number assigned by the program. For clients who are assigned a number and readmitted into the program later, there is the possibility that they could have had more than one number entered in the records. As a result, there could be two files for one individual. This may not be a common occurrence, but programs should be aware that over a period of years, different personnel and procedures may have created inconsistencies and errors in client records.

[2]It has been determined from the administrative rule governing the "Minnesota Date Privacy Act" that a program's client number could identify an individual in some circumstances.

The first approach to compiling a list of eligible clients and identifying repeaters requires that the case files be checked against the log of admits. If two or more client files exist for the same person, they should be consolidated, so that one file includes all admittances. A new list of clients should be made by eliminating duplicate admits from the log, which will result in an accounting of how many individuals were actually seen by the program.

For example, a program decides to sample from a population of former clients seen over the past two years. The records indicate that there were 325 admits during that period. After checking for repeaters, the program discovers that 50 admits were clients who were previously admitted in the two year period. The population would actually consist of 275 people. A study number would then be assigned to each client, thus assuring that the same person would only come up once when the sample is drawn.

Another approach would be to assign each admit a study number before the sample is drawn. Then each number would be checked against the client files to see if there were any duplications of individuals. If a duplicate is discovered, it would be discarded and a new number would be drawn until each individual in the sample is represented only once.

When eligibility for a study is determined by membership in a special subpopulation instead of by program participants from a specific time period, the list of clients will need to be compiled from the data in the case files. However, this method requires that each file be examined for consistency in the recording of information that is needed to define eligibility and will take considerably more time than the previously mentioned methods.

Master client file. After the sample has been drawn, it will be necessary to establish a card or folder for each client within the sample, using the assigned study number. This will serve as a master client file to be used by follow-up staff throughout the study.

The master file should contain information which will help locate a respondent and should also include a list of identifying characteristics. Items such as addresses, birth date, nicknames, occupations, social security number, names and addresses of relatives or friends who might know his/her current location, and any other descriptive data should be included on a "search sheet." This information will be used by those persons who attempt to locate the client, and by the interviewer to confirm that the respondent is the correct person.

Another purpose of the master client file is to reveal at a glance what has been done and what remains to be done to complete the follow-up. At a minimum, the records should indicate the following: 1) what has been done to trace the client, the leads that have been exhausted and the new leads that have been found; 2) the efforts made to interview the client, and their results; 3) location, method and date of the interview; 4) whether the data collected have been edited for completeness and clarity, including further contacts by the interviewer to get missing information; 5) whether the interview data have been turned over to analysis personnel or coded for analysis.

Similarly, other steps for retrieving information from the client files should be listed and checked off in the master file. The forms used should provide enough space for dates to indicate when each step is completed, and to describe reasons for any difficulties and what is to be done about

them. In general, the simpler the forms, the better, but they must contain enough information so that the project coordinator can quickly review the status of all cases. It will then be possible to make periodic checks to see if the project timetable is being met, and to identify any problem areas that need attention.

Documentation of decisions. Research events and decisions should be recorded as they occur throughout the entire research process. There will undoubtedly be a significant number of emerging problems and decisions to be made during the study, and it is amazing how quickly one can forget which decisions were made and why. A careful record of these decisions should be preserved, since a detailed accounting of procedures will enhance the meaning of the findings.

LOCATING CLIENTS

The study coordinator will need to anticipate the types of problems that may arise in locating clients and scheduling interviews. Certain problems will be due to the specific nature of the program's services and the clientele it serves. Nevertheless, most programs that attempt to follow-up clients who have been out of the program for several years will find the task of locating a high percentage of the sample particularly challenging.

Problems in locating clients[3]

Certainly, chemical dependency programs serve a wide variety of people. However, there are some circumstances which may make the task of finding clients of chemical dependency programs more difficult than in a study of the general public. Certain clientele may represent an extreme case for the following reasons: 1) they are more mobile than the average follow-up subject; 2) they are unemployed and poor, which further increases their mobility; 3) they are less often registered in many sources that provide changes of address for most people, such as the phone book, post office listings, voting records, etc.; 4) they may have poor ability to sustain personal relationships, which means their relatives, spouses or earlier friends may no longer know where they are and may not have heard from them for a long time. Even if found, some may not respond to a follow-up contact due to their being engaged in illegal activity and/or illicit drug use, out of fear of arrest.

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[3]This section is adapted from the Treatment Program Monograph Series. No. 2, Conducting Follow-Up Research on Drug Treatment Programs, Chapter 5, Ethical Considerations, written by Lee N. Robins and Edward J. Smith, published by NIDA, 1977.

Some clients will be a great deal easier to locate than others. Those who have remained in a program longer will be found more easily because their habits and interests will be better known and their records will contain more clues for locating them.

Further, those clients who are doing well, whether as a result of treatment or spontaneously, are more likely to have a life-style which involves less moving, better employment status, more contact with relatives and friends, more community exposure, and consequent ease of location.

At the same time, some of those who did not do well after the program may be back in treatment, incarcerated, or may have died. These outcomes may be documented through examination of official records or through contact with relatives or friends. However, it is important that the status of each client is verified as thoroughly as possible before it is determined that he/she is unavailable for an interview.

Since ease of location is usually associated with positive outcomes, recovery of a high percentage of the sample is necessary to avoid having a biased estimate of outcomes in the study's findings.

Consideration of cost

For the researcher, the matter of hard-to-locate or reluctant clients raises the question of when to give up. This question is related to the study's cost-effectiveness. Unavailability and refusal to participate is inevitable for some clients, but a study with a large number of completed interviews will give a more realistic representation of program clientele. In most studies, interviews on the first half of the sample will be relatively inexpensive; the next 15-20 percent will cost appreciably more. Completing

the last 20% could cost twice as much per case as early interviews. Consequently, a study with a high completion rate cannot be done cheaply.

Resources for locating clients

Public Records. City directories and telephone listings are obvious sources for locating clients and contacting relatives and friends to learn the client's whereabouts. If this fails, a street address directory can be rented from the telephone company. This directory lists telephone numbers by residence instead of name and it allows one to call former neighbors of a client to get information on where the client may have gone.

Another major source of help is the U.S. Post Office, which records address changes. For about 25¢ per address, the post office will correct names and addresses if there is a change notice on file, and when "address correction requested" is printed on the envelope. The "special delivery/ return receipt requested" service is also helpful because the name of the person who accepted the letter will be supplied and this may provide an additional lead to the client. In addition, a special delivery letter emphasizes the importance of the study and increases the likelihood that the client will read it more carefully when it is received.

Other agency sources (private records). Certain agencies can be contacted if routine methods have proved unsuccessful. However, many of these agencies are now considered holders of private data on individuals and will require the client's written consent to release information before it can be given to researchers. As a result, these sources will be considerably more difficult to tap for client locator information.

Some of the sources within the state that can provide information, if there is client consent, are law enforcement agencies (police, prison,

parole and probation records), the state department of health, social services or welfare agencies, state hospitals, Veterans Administration Hospitals, and other chemical dependency programs.

Issues of confidentiality are of great concern here, and the recommendations discussed later in this chapter should be considered carefully, particularly those concerned with sharing information about a client beyond what is already known.

Permission and consent forms

There are several procedures for preparing clients for follow-up and eliciting clients' participation in a follow-up study. The following discussion concerns the appropriate methods for each of the procedures, so that they comply with confidentiality and privacy regulations.

Obtaining a signed statement from clients that they will participate in a follow-up study is most advantageous if it is done well in advance of the study. This can be done either at admittance or discharge from the program.

There are four major reasons for presenting permission forms: 1) it advises the client of the study; 2) it provides an opportunity for the program to learn where a client will be at a later date; 3) it will ensure that the client has been informed of his/her confidentiality and privacy rights; 4) if specified, it will give a third party, such as a research group, the right to contact the client directly.

Permission forms can also be used just prior to the interview, to document that the client understands the nature of his/her participation.

Below is a sample of a permission form used in a recent study.

It was presented to clients before they were discharged from the program.

Permission Form

Please read the following and sign your name below, if you agree to participate in a follow-up study of _____.
(name of program)

1. I understand that if I give my permission to be interviewed, I will be asked questions about my experience with the program, my chemical use and changes in my life since I was in the program.

2. I understand that my participation is voluntary and that I may withdraw my permission at any time without negative consequence.

3. I understand that all information is confidential and that my name or identity will not be used or revealed in any way.

4. I understand that the purposes of the study are to find out about the services I received, my opinion about the program and to learn about the role of alcohol and/or other drugs in my life. I also understand that the study findings will be used to help plan better programs and services in the future.

_____
Client's Signature Date

Thank you very much for your cooperation. If you agreed to participate, please give the following information.

Present address_____

Present phone number_____

What time of day would be best to call?_____

Name and address of person who will know how to reach you_____
_____

If not participating, please note reason._____
_____
_____

Form presented by:_____
(Staff person) Date

_____

The staff person who presents the form to a client should be prepared to answer any questions that the client may have and should also be responsible for putting the form in the client's file. If the client refuses to participate in the study, any reasons for the refusal should be noted as well. This way, a program will best be able to document those clients who agreed to participate and those who did not. Close monitoring of this procedure is essential, so that a client is not omitted from the process.

The permission form is a variation of what is known as an "informed consent" statement; however, it speaks only to a client's participation in a follow-up study and does not address other authorizations for the program. Program authorization to obtain information about a client from other agencies or persons, and/or allow a program to release information to other specified persons or agencies requires a different type of written statement. It is necessary to state on these forms which agencies will be contacted or what records will be examined, and to give a date for which the authorization to search or disclose expires. For further information on statements of consent, a program should consult the "Minnesota Data Privacy Act" and confidentiality guidelines provided by the state.

Other considerations for consent forms. Obtaining signed permission and consent forms at admission to a program can present both psychological and ethical problems.[4] Requesting a client's agreement to these statements may cause a client to feel pressured to cooperate. The program's attempt to obtain permission may imply to them that they have to consent to follow-up in order to be admitted into the program. It is important to make clear to the client that receipt of services is not in any way contingent upon participation in follow-up.

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[4]Ibid.

Whenever a program successfully gains access to other records or gets authorization to contact persons for information regarding a client, two general operating principles should be followed. First, clients should never be identified to any person or agency as persons who have received drug-related services, unless this information is already known to be in their possession. The second guiding principle is that in the process of asking for information, one should never reveal more about a client than the person or agency already knew when they were first contacted.

Introductory letters to former clients

One approach for eliciting past clients' participation in follow-up involves sending a letter to those who are selected in the sample. As discussed in Chapter IV, the ethical considerations discussed in the federal regulations of confidentiality recommend two major precautions.[5] First, no mention of alcohol or other drug treatment should be made in the initial letter to clients. Second, the study should be conducted under a neutral study name.

Some suggestions for study names might be to use (with authorization) the title of an umbrella agency such as a health department, social service organization or research group. A study letter can also speak generally about a health survey and state that it is part of an effort to acquire information about health needs or treatment facilities. This is not to mislead clients, but to respect their privacy.

The following guidelines should be considered when the initial letter to former clients is designed.

1) The letter should not be on the program's letterhead. A neutral study name should be used (e.g., Hennepin County Services Survey).

[5] Ibid.

2) The return address and/or the return envelope should also state the neutral study name, using the program's address if that is where the interviewing will be scheduled.

3) The letter must cover these basic points:

...the purpose of the study (e.g., to study changes that occur in people's lives)

...that clients have been specially selected for participation

...that the client's participation is voluntary

...identification of the study's source of supporting funds

...a guarantee of confidentiality

...a phone number or address to contact, and directions for replying

...notice of how further contacts will be made if the respondent is not heard from, and the length of time before the next contact.

Obviously, the introductory letter should communicate clearly the intent of the study and the instructions to the clients. It is also helpful to emphasize the importance of clients' participation. Below is an example of an introductory letter which follows the above guidelines. It represents a conservative approach to confidentiality issues as suggested by NIDA publications on follow-up.

Study Title

Date

Dear _____,

You have been specially selected to be a participant in a research project we are conducting. The project is sponsored by _____ (funding source) under the direction of _____ (name of director).

The study concerns the changes that occur in a person's life and the effect they have on his/her well-being. We would also like to ask your opinion of services provided by certain health programs in the community. The study findings will be used to plan and improve future programs.

Your participation will involve giving us an interview for which we are going to pay you. Your participation is completely voluntary. An opportunity to inverview you will be very important to the research we are doing.

We would appreciate it if you would call us as soon as you receive this letter. (If you are out of town, please call us collect.) This will allow us to explain more fully what the interview involves and to set up a convenient time to interview you. All of the information you give us during the interview will be strictly confidential and your name will not be used in any way.

There is someone in our office every day between 8:30 A.M. and 4:30 P.M. Our phone number is _____. If we don't hear from you within two weeks, we will telephone you to explain further what our research involves and why we want to talk with you.

Thank you very much for your cooperation.

Sincerely,

_____
Project Director

Instructions to office staff

When the initial letter instructs clients to call to make an appointment or to ask any questions they may have, the office staff will need to be prepared to take these calls. The staff should have a copy of the letter on hand for reference, plus written instructions for making appointments and a list of questions respondents are likely to ask. Answers to these questions should be provided also.

It may be helpful to install a special telephone line for the duration of the study so that calls related to the study can be received at one number. This will allow the staff to respond appropriately when the designated phone rings.

Scripts prepared to guide staff when speaking to study subjects should be carefully designed. Ethical considerations suggest that no reference to chemical use or a study of chemical users be made because there is no guarantee that the person calling is really the research subject even though she/he may say so.[6]

Staff should be instructed to use the following guidelines:

1) Answer the phone with the neutral study name.
2) Do not mention the subject of chemical dependency treatment or chemical use.
3) State that they are not at liberty to discuss all aspects of the study.

As mentioned earlier, the purpose of these procedures is not to deceive the clients, but to protect them from unintentional disclosure. Not until the client presents him/herself at the study office or to an interviewer, should the complete nature of the study be revealed.

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[6]If a procedure is designed for assuring the caller's identity, these precautions would not be necessary.

Sample scripts to staff

Follow-up arrangements and procedures will be unique to an individual program and will, of course, require a script to comply with the study plan. However, the scripts listed below will serve as examples of how they can be designed to assist the staff. Note that the scripts contain no references to chemicals, chemical use or study of chemical users, thus respecting the privacy of people who might object to discussion of these issues on the phone.

Questions likely to be asked by respondents[7]

How was I picked?
Why was I picked?

"Your name was selected from a list of many who could have been chosen by a scientific procedure called "random sampling." This means that you will be used to represent a number of people, and instead of interviewing all of those people, we have chosen you. Your selection was a matter of chance and this is the way all of the people who are part of this study were chosen. If we fail to interview someone who has been selected, not only will that person be missing, but all of the people he/she represents will be missing from the study. That is why it is important to get your cooperation and to set up a convenient time to interview you."

What questions will you ask?
What do you want to know?
What is the interview about?

"In general, the kinds of things we will be asking about are the changes in your life and how your health has been in the last few years. If there are any questions that you do not want to answer, you don't have to, or if you should decide you would like to stop the interview for some reason, you will, of course, be free to do so. Naturally, we would like you to give us an interview that is as complete and accurate as possible."

Why do you want to know these things?
What are you going to do with the information?

"The information we get from you will help us to understand the adjustments people make in their lives when things change for them. Increasing what we know about these things may make it possible to help improve program services."

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[7]Ibid.

Where did you get my name/address?
How did you get my name/address?

"We have names of people who have used various services provided by agencies or programs in _____. However, we must protect
(city or county)
the confidentiality of our sources of information, namely the program and the people we interview. When you meet with the interviewer, he/she will be able to tell you more about how the participants were chosen."

Who is doing this study?

"The study is being conducted by a research group called _____, sponsored by _____. All of the information you give us will be used for research purposes only. Your name will not be attached to the interview, thus making it anonymous. All of the information is kept strictly confidential; your privacy in this regard is protected by state and federal laws governing research studies."

What is the study all about?

"Basically, the study is concerned with the changes that occur in a person's life and the effect they have on his/her well-being. It is not possible to explain the entire project over the phone, when you come into our office you will be given any further information you want."

How long will the interview take?
How much are you going to pay?

"Some interviews run longer than others, however, it won't take longer than two hours. We want to pay you for your time. We'll pay you $_____ at the end of the interview."

If phone interviews are to be conducted, an appointment could be made at the time a client responds to the letter. The interviewer would then be responsible for verifying that the client is the correct respondent and could then explain the study more fully.

Initial phone contact

If follow-up staff attempt to locate clients by phone without an introductory letter, there are some further precautions to be taken.

If calls are being made to other persons to locate a former client, staff must also protect that client's privacy. If asked, staff could say they are working for a general agency, such as the State of Minnesota, and are interviewing people who have used various state services, but should not mention the program by name. The contact person can state that the person being sought has been drawn in a random sample and that the purpose of the call is to schedule an interview. However, this should not be offered unless it seems to be the only way to get the client to the phone or to find out where to reach him/her. A script explaining the study should also be prepared for the staff who attempt to contact follow-up subjects by phone.

Informing clients of the study

People may be reluctant to grant an interview for a variety of reasons: they may feel they are too busy; they may suspect the contact person is from some other state agency, such as corrections or revenue; or they may feel embarrassed. If the contact person senses this reluctance, he/she should be clear about the nature of the study and emphasize the importance of the client's participation.

It is necessary to provide an opportunity for staff to practice the procedures for contacting clients within a training session. At that time, all aspects of the contact can be tested to assure the staff's understanding and their ability to convey the information effectively.

Problems after locating the client: Broken appointments[8]

Broken appointments, after an interview has been scheduled, are a particularly common problem in follow-up studies.

[8]Ibid.

The interviewer will need a strategy to deal with clients who do not show up or who are unavailable at the time of the scheduled interview. The following suggestions are made for re-contacting a client possibly to learn the reason for the broken appointment, but more importantly to schedule another interview time.

Waiting time. If a client has not called to explain his/her lateness, or fails to show up for the interview within 30 minutes of the scheduled time, the interviewer should attempt to re-contact the client by phone.

Re-contact conversation. When the call is made, the interviewer should identify him/herself by name and ask to speak to the client. If the client is not there, a message should be left that _____ will
(interviewer's name)
call back. If the person answering the phone knows about the scheduled appointment, he/she may volunteer information as to where the subject is or when he/she will return home. If the information indicates that the client "forgot" or "couldn't make it," then the interviewer should respond in a positive way, stating that the subject should not worry about missing the appointment ("We'll just set up another appointment at another time.")

Making another appointment. If the subject is present when the interviewer calls, the conversation should be pleasant and assertive, such as, "This is _____ , from _____ . My calendar indicates that we have
name study name
an appointment today for an interview. I thought I'd call to see if you were delayed or on your way, or to see if we could make an appointment for another time. Now, would tomorrow morning or Friday afternoon be better times for you, or do you think you still have time to come down today?"

Arranging for transportation. If transportation seems to be a problem, another tactic that can be used is to center the conversation around ideas to

help the client. For example: "I was concerned that you might be having a problem getting a ride here, so I thought I'd call to see if you could take a cab or if someone from my office could come out to get you. If you take a cab, we will pay the fare both ways. Just have the driver stop in front of the building and someone will come to pay the fare."

A friendly and understanding approach. It is also a good idea to suggest to subjects that probably something unforeseen had come up at the last minute to cause him/her to miss an appointment. The emphasis in this approach to "no-shows" is to accept whatever excuse the subject may have for not showing up, not questioning whether a subject really intended to come in or not. But if a person misses more than two appointments, a different approach will probably be more effective--one that displays more confrontation and less client accommodation.

Changing the interview site. The purpose of an understanding approach is to allow the interview to be completed eventually. However, it may be necessary to change the site of the interview in order to secure completion. It may mean going to a client's home, picking a client up after work and conducting the interview then, or meeting the client at a restaurant and conducting it there.

An appeal to reason. In the event that a client indicates that he/she is having second thoughts about participating in the study, a different approach should be used. Instead of trying to secure an immediate appointment, the interviewer should talk about the importance of the study and clients' participation, perhaps suggesting that the client think about it for a few days before the interviewer calls back to make an appointment. Generally, this appeal will keep the lines of communication open and in some cases will

result in a completed interview. In other cases, however, there may be nothing that will persuade a client to participate in the study.

Pretesting the study procedures

One of the most important procedures to be followed is the pilot study, or field test, of the follow-up scheduling and interviewing plan. A pilot study is a small scale study, on perhaps 10 to 20 ex-clients, which is done after the interviewers and other staff have been trained and provided with documented procedures.

The field test should incorporate all of the procedures outlined for the main study. It should involve only clients who will not be in the sample of the main study, but as much like them as possible. To ensure this, it should be done on those clients within the population from which the sample was drawn.

The pilot study gives an opportunity to pretest the interview schedule and to revise the follow-up interview or questionnaire, when questions prove to be unclear or when categories of answers are inadequate. It very often will indicate the need to reduce the number of questions in order to keep the total interview time within limits the respondents will accept. It is also necessary to assure the interviewers' understanding of the instructions and intent of the questions. Each interviewer must record the same type of response consistently, in order to make the collected data reliable.

Additional benefits include the identification of staff who are particularly good at certain functions, of those who may need further help and the development of some early cost estimates.

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CHAPTER VI. DATA COLLECTION: COORDINATION, TRAINING AND SUPERVISION[1]

by

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The implementation of data collection is one of the most expensive and complicated tasks of a follow-up study because it involves the coordination of work for a number of people. Consequently, it is important for the effort to be managed with an eye toward avoiding waste while at the same time achieving quality in the data.

One major reason these goals may be difficult to achieve is that the data collection process requires integrating the services of people who will locate and interview clients with those who designed the study and those who will eventually analyze the data. In most studies researchers and interviewers will work independently, without the benefit of each other's feedback or guidance while the data is actually being collected. Since the follow-up coordinator will usually have the responsibility of conveying the study's intent, design and procedures to interviewers and other follow-up staff, a substantial amount of preparation will be necessary to provide comprehensive orientation for all of the people involved.

This chapter outlines a number of factors to consider in order to control the quality of the data that is collected. It covers the following:

1) Planning for interviewer recruitment;

2) Selecting interviewers: qualifications;

3) Interviewer training: planning and content;

4) Supervision and monitoring of data collection.

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PLANNING FOR DATA COLLECTION[1]

The project coordinator should have the method and arrangements for data collection clearly specified before he/she begins to recruit interviewers. Job descriptions for interviewers should include detailed responsibilities and a plan for how the work will be performed within the program's normal staff operations.

Once the number of interviewers needed is determined, office space for scheduling and conducting interviews must be secured. It is important that the office space is private, neutral, and available exclusively for this function for the duration of the data collection. If more than one interviewer is used, it may be possible to schedule their work alternately within the same office space rather than obtaining a separate office for each interviewer.

Some further consideration should be given to documenting scheduling and training materials in advance of selecting interviewers so that specific inquiries about the job can be answered. At a minimum, a job description, pay rate, time requirements, beginning and ending dates for the project, and any other necessities of the job such as a car, availability during evening hours or for travel, and any basic educational requirements should be determined before applicants are sought.

A helpful procedure for assessing applicants during recruitment interviews is to ask them to interview someone using a simple questionnaire with clear instructions. If they perform the task well and meet other criteria discussed in the following section, they probably are good people to select for the job.

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[1]Chapter IV discusses options for acquiring personnel to locate and interview former clients. It outlines advantages and disadvantages of three approaches: 1) using existing staff of the program, 2) hiring additional personnel from outside the program, and 3) contracting for interviewers with a survey/research organization.

SELECTION OF INTERVIEWERS

Educational Background

There are a number of characteristics that can be observed and identified in candidates that will indicate their potential as effective interviewers.

Generally, personality traits will indicate more about a person's qualifications for interviewing than past experience or educational level. Nevertheless, interviewers will need to be sophisticated in terms of working closely with people and be capable of administering the type of sensitive questionnaire that is often used in follow-up studies of chemical dependency programs. One way to give some assurance that interviewers will have the necessary ability is to require that they have had at least some college education as well as some experience working with people individually.

Personal Qualities

One essential qualification for interviewers is that they have a genuine curiosity about people and their experiences. This trait should be accompanied by good listening skills and sensitivity to life-problem areas.

A second important characteristic is acceptance of other people without judgment. Candidates should be able to ask questions in a supportive way that will encourage clients to be open and honest in their responses. People who are shy will not make good interviewers, nor will those who are aggressive, overbearing, or hostile.

Third, candidates should be naturally compulsive and accurate record-keepers, and possess legible handwriting. Complete and accurate recording

is particularly important for follow-up staff who will be responsible for locating clients and providing summary data that document the attrition from the sample.

Interviewing Experience

The interviewing techniques used in follow-up are quite different from other interviewing skills, such as those used in counseling or personnel interviewing. Applicants with skills in interviewing for other purposes will still need special training to learn appropriate follow-up procedures and techniques.

Matching Interviewers to Clients

It does not seem to be important to match the age and sex of interviewers with the clients. Many studies have used both men and women as interviewers for predominantly male programs, and the quality of the data was not effected when interviewers of the opposite sex were used.

However, studies that will deal with racial/ethnic groups exclusively will benefit from the use of interviewers from the same racial/ethnic background as the respondents.[2] In some communities, an interviewer will have less difficulty getting information from respondents if he/she is not perceived as an outsider. Interviewers should also be able to give assistance in translation when English is not the first language of the respondents.

If the sample has known proportions of various racial/ethnic groups, interviewers might be hired in the same proportions in an effort to match them with the respondents.

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[2]NIDA Publication - Conducting Follow-Up Research on Drug Treatment Programs.

Chemical Abuse/Dependency Background

Many researchers have used interviewers previously trained as counselors in drug abuse/chemical dependency, expecting that they would be more successful in obtaining accurate information from clients. This is not substantiated by several large studies of chemical dependency programs that were done with interviewers from outside the chemical dependency profession. In fact, it has been shown that there are advantages to using people somewhat removed from chemical dependency treatment, in order to enhance the objectivity of the study.[3]

Since neutrality is one of the more important considerations for selecting interviewers, a candidate should first be able to avoid judgment and refrain from over-identifying with the respondents. Interviewers who have been through a chemical dependency program or who are chemically dependent themselves are more likely to identify closely with clients and therefore create a higher risk of bias in the collected data.

On the other hand, a person who has never used any mood-altering chemicals would probably not make a neutral interviewer either. Obviously, finding life-long non-users to do interviewing would be difficult in our culture. The point is made only to illustrate extremes in interviewers' "identifying" capabilities.

It is equally important for an interviewer to be comfortable and convey interest in a respondent. This behavior will increase the comfort of the respondent and do more to elicit accurate information than would an interviewer's chemical dependency knowledge.

While questionnaire design will determine a great deal about the analyzability of the answers, the interviewers' technique and attitude will often be the determining factor of clients' willingness to respond honestly and appropriately to the questions.

[3]Ibid.

Nevertheless, if a client chooses deliberately to distort the truth with his/her answers, it may be difficult to detect or control even for the most sophisticated interviewer. Fortunately, this type of dishonesty can be minimized to a great extent by a non-threatening interviewer and a neutral environment.

INTERVIEWER TRAINING[4]

The training program for interviewers should focus on the objectives of the study. Basically, the goals are: 1) to collect accurate data, 2) to collect data from as many respondents in the sample as possible, and 3) to collect data within the limits of the project budget.

To collect data that are accurate, interviewers will need to spend ample time developing their skills in administering the questionnaire through role-play practices. Certain aspects of interviewing technique can be learned through demonstrations, discussion and reading materials, but they cannot be developed as skills without sufficient practice.

There are training manuals and video tapes available from several large research groups that teach interviewing techniques (listed in Appendix A of this chapter). These training materials may be rented or purchased inexpensively. However, if adequate funds are available, programs may decide to use a survey research consultant to help develop and/or conduct the training.

Planning a Training Program

Some programs may wish to undertake their own training program for the people who will be used as follow-up staff. The fundamentals of planning training sessions for follow-up are summarized here as a guide for those programs.

Length of training and teaching methods. An adequate training program can usually be done in three to four days. In order to minimize fatigue and maximize learning, each daily session should not run longer than seven hours.

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[4]Some materials in the section are adapted from "Interviewing Respondents," by Celia Homans, Chapter 7, Conducting Followup Research on Drug Treatment Programs, of the National Institute on Drug Abuse Treatment Program Monograph Series, Number 2, pages 85 to 97.

Trainees will maintain a high level of interest if the sessions consist of varied teaching methods and techniques. A combination of reading materials, didactic instruction, group discussion and role-play exercise has been found to be an effective program for preparing follow-up staff. Appendix B contains a sample training program agenda.

Interviewing Techniques. There are several important principles of interviewing. First, an interviewer should relate to a respondent in a pleasant manner, but also remain neutral and businesslike. In order to keep his/her manner from becoming social, an interviewer may have to assert directives to continue on with the interview, should a client begin talking about subjects not related to the interview. However, the interventions made by the interviewer must be tactful. For instance, the interviewer might say, "It is interesting to hear about your operation. Perhaps you can answer the question which concerns your length of stay in the hospital, if I re-read it."

With regard to other distractions, such as inappropriate hospitality, the interviewer must try to avoid anything that creates difficulty or interferes with the process of completing the interview in as short a time as possible.

The second principle for interviewing is that the questionnaire must be followed and the questions read exactly as they are written. This is imperative for ensuring that each respondent is answering the same question. Emphasis must be made that even a slight change in a question can change its meaning entirely. For example, "When did you go to the treatment center?" is considerably different from "When did you last go to the treatment center?" Obviously, valid comparison cannot be made without knowing respondents have answered identical questions.

The third principle of interviewing involves a technique called probing. Probing is a way to get additional information, a clearer answer, or a fuller description of an opinion, without influencing a respondent's answers. Probing techniques are discussed further in the sample interviewer manual, Appendix C of this chapter.

Interviewers need to know the purpose of the questions, flow of the questionnaire (including "skip" patterns, where the next question depends on the answer to a previous question), the probes that apply to certain types of questions and also problems that may arise during the interview, some of which are discussed in the appendices of this chapter. Interviewers should be provided with a manual developed for the specific study for use during the training and for reference while data is being collected.

Confidentiality and privacy. All aspects of confidentiality and privacy should be clearly presented during the training. Documentation of procedures to protect client privacy should be included in the interviewer's manual to assist them when they contact and interview respondents. To help secure the privacy of data, it should be required that all project information be placed in locked files when it is not being used. In addition, the coordinator should closely oversee the procedures for removing identifying information and storage of completed forms.

Another aspect of confidentiality is the risk of interviewers' verbal disclosure of information outside of the project. It should be emphasized that their role as interviewers is one of committed confidentiality and any breach of this rule should be considered grounds for dismissal. To help ensure this, interviewers should be instructed not to discuss interviews with anyone outside the project, even if names are withheld. However, it

is helpful if interviewers are provided an opportunity to discuss their experiences and share interesting interviews during periodic conferences with the project coordinator/supervisor.

Attitudinal issues. It is rare, indeed, to encounter a person who does not have an opinion about drug problems, and who these problems effect as a result of his/her own experience. Some steps toward attitude awareness and increased interviewer objectivity should be taken during the training by furnishing pharmacology and chemical abuse information that will help dispel myths and stereotypes of people with drug-related problems. Beyond providing education, this approach can assist interviewers in identifying their biases (beliefs) and will increase their awareness of how they might unconsciously attempt to influence client responses, whether verbally or non-verbally.

Presentation of issues surrounding drug related problems can be dealt with in a number of ways. Videotapes, films and reading materials are available from many sources. The Drug Information Service Center at the University of Minnesota has an exceptional library for this purpose.

It is essential that the drug-related information present arguments from both conservative and liberal perspectives, so that the trainees can place themselves somewhere on the continuum of attitudes. A list of topics for discussion and titles of available recorded information is listed in Appendix A.

The goal of the attitudinal session should be to assist interviewers in identifying their positions on the attitudinal continuum and to recognize why they placed themselves there. It should be made clear to trainees that they have a right to their own opinions, but that those opinions should not

be evident at any time during their contact with clients. This means that it is inappropriate for an interviewer to counsel or advise clients, even if clients ask for the interviewer's opinion.

The only suggestion that an interviewer might make is by way of a referral to an agency or counselor. However, a referral should not be given unless the client asks for help. A referral should not take place during the interview but should be put off tactfully until all of the questions have been answered. Instructions for giving referral information to clients who request help should be covered in the training along with familiarizing trainees with local resources that can handle a variety of problems.

Practice interviews. As noted earlier, a large amount of training time must be spent familiarizing trainees with the questionnaire and practicing interviews. Initially, the questionnaire should be reviewed question by question, clarifying the intent and instructions for each item.

It is a good rule to require each trainee to do several role-play interviews, varying the respondents (played by another trainee) in terms of chemical use pattern, life-style and post-program attitude. As the training progresses, role plays should be seasoned with some unexpected difficulty, possibly portraying some identified problem areas for the trainee. It is essential that each role-play is discussed by the group after it is completed, to give trainees feedback about their delivery and probing skills. Critique and suggestions should be made by demonstrating alternative behaviors that are more appropriate.

The practice interviews may indicate the need to rearrange the questionnaire items to improve the flow of questions, to reword questions

or to include additional response categories. Therefore, to help clarify and improve the instrument, it is wise to request the presence of the research designer at these sessions.

The training is also where checks on reliability of interviewer recording takes place. As part of the role-play exercise, all of the trainees should record the answers of a respondent, as though they were conducting the interview that is being observed. When the interview is finished, the group then compares their recording of each response. When differences appear, the trainer must indicate the correct way of recording the response. This exercise will help assure consistency in interviewers' recording patterns.

Scheduling procedures. Contacting and locating clients, arranging a place and time for interviews, and ways for dealing with difficult situations should be clarified through review and discussion of written instructions. A procedure for "checking out" the trainees' comprehension of the instructions is to have each trainee role-play a situation from the initial contact through editing the completed questionnaire. This exercise will often raise questions that will indicate where the instructions are unclear. This will give the trainer an opportunity to reiterate instructions and/or modify them as needed. In addition, preparation of the study records, such as retrieving information from client files, maintaining control files and accounting for the sample must be communicated thoroughly and checked out through observation by the trainer.

Miscellaneous and special instructions. Some studies will require more detailed and specific instruction than others, depending on the procedures needed to accommodate the scope of the project. Some of these special options for follow-up are discussed below.

1) I.D. cards or letters of introduction. When interviewers first meet with respondents, they may be asked to show their identity indicating their affiliation with the project. Identification cards may be printed showing the "neutral" study name along with the phone number of the study office. This way, if there still is some doubt, the respondent can call the study office to verify the interviewer's name. Letters of introduction from the study director are also effective when used for this purpose.

2) Introduction by interviewer. Instruction to the interviewer should include direct and to the point responses for answering respondents' questions regarding the purpose of the study and what good it will do them. Emphasis should be made that the purpose of the study is to find out about both good and bad experiences in the program and that the study will play an important role in the design of future services.[5] By conveying the importance of the study and asking for negative as well as positive comments, the respondent will likely feel more comfortable in being honest with his/her answers.

3) Informed consent and legal forms. Interviewers may be assisted by documentation that can be shown to respondents explaining confidentiality, clients' rights, and privacy, and also laws which govern the conduct of research, such as those that may state conditions for the release of clients' names to research groups.

[5]Chapter IV discusses scripts for follow-up staff in more detail.

SUPERVISING AND MONITORING DATA COLLECTION

Interviewers work very independently, which means they can occasionally lose touch with the goals of the study and with details they learned in training unless they have regular contact with the project coordinator. Careful supervision is essential in the first few weeks of the study and will require interviewers to report their progress frequently. After this period, the coordinator should check interviewers' work at regular intervals.

Validation of Interviews and Editing

Validation of a completed interview consists of the coordinator contacting a respondent again to verify that an interview actually took place and includes asking a few questions from the interview to see that the information is accurate and complete. This procedure may not be appropriate for some studies, particularly when a coordinator can observe how much time the interviewer is spending with a respondent, if interviews are conducted in one main office. However, it is advisable to validate some interviews, selected at random, when they are conducted in the field.

The procedure for validation should be developed with the following considerations:

- Preparing the respondent by explaining the procedure and that someone may call to validate the interview.
- Keeping the manner of validation consistent with the promise of confidentiality.
- Things to verify might be:
  - Date of interview

-- Length of interview (allowing approximately 30% discrepancy)

-- Birth date to verify respondent's identity

-- Several questions from the interview (limited to those the client is likely to answer the same way and knows the answer to)

-- Validators should not know the original answers to the questions beforehand.

-- Validations are usually conducted by phone.

When discrepancies are found, the interviewer should be relieved from working for a couple of days, so that more validation of his/her work can take place.

If there is consistent evidence of disagreement with validation, then all the interviewer's work should be checked and steps should be taken to remedy the inaccuracies.

After the interview has been checked by the interviewer, it is also a good procedure to have a member of the follow-up staff check the completed questionnaires for skipped questions and errors in recording. Errors should be discussed with interviewers on a regular basis for the purpose of correction.

APPENDIX A

SOURCES FOR INTERVIEWER TRAINING MANUALS

"University of Michigan Manual"
Publications Office
Institute for Social Research
University of Michigan
Ann Arbor, Michigan 48106

National Opinion Research Center (NORC)
6030 South Ellis Avenue
Chicago, Illinois 60637

Videotape -- "Interviewing Techniques"
Mathematica
P.O. Box 2392
Princeton, New Jersey 08540

Suggested topics for discussion for attitudinal assessment:

-- Psychology of intoxication[1]
-- Theories of chemical dependency; disease concept, behavioral, predisposition and hereditary theories (all are discussed in the Rand Report, Alcoholism and Treatment, Amour et al, Chapter 2, "Perspectives on Alcoholism and Treatment"
-- Illicit vs. licit drugs (including prescriptions)
-- Pharmacology, effect of drugs/alcohol
-- Polydrug use
-- Alternative and traditional treatment
-- Implications for prevention and early intervention of drug problems
-- Definition of drug-related problems, e.g., negative consequences
-- Labeling people chemically dependent
-- AA philosophy

[1]Workbook available: Psychology of Intoxication, by Cullen et al. (Drug Information Service Center, University of Minnesota).
Film and videotape: "Attitudes Towards Intoxication. A Model for Understanding Drug Taking Behavior" by Dr. John Brantner, Department of Clinical Psychology, U of M (also available from DISC).

APPENDIX B

LEARNING OBJECTIVES FOR INTERVIEWER TRAINING

TO ASSIST PARTICIPANTS IN THE FOLLOWING:

1. Developing an understanding of persons experiencing chemical use problems.
2. Recognizing their own attitude regarding drugs and drug users.
3. Understanding the prevention and development of chemical use problems.
4. Discovering resources available for more extensive diagnosis, client referral, and additional information.
5. Understanding intended impact of service delivery under study and purposes of follow-up.
6. Understanding conduct of follow-up with regard to confidentiality issues.
7. Application of recording and coding procedures for the questionnaire.
8. Developing interviewing techniques.
9. Developing schedules for interview and data collection.

SAMPLE TRAINING PROGRAM AGENDA

Day 1

9:00 a.m.	Welcome, overview of the training program
9:15	Review of the study; purposes and goals
9:30	The program; philosophy, clientele, and objectives
10:00	Attitudinal issues (presentation by a qualified person); social, prescription, and illicit drugs, theories of chemical dependency
10:30	Break
10:45	Videotape "Psychology of Intoxication" Group discussion
11:45	Confidentiality, study design and procedures for protecting client privacy
12:30	Lunch
1:30	Drugs and their effects (presented by a qualified person); pharmacology, and poly-drug use Group discussion

2:15	Treatment modalities -- Traditional and Alternative Review of printed materials and discussion
3:00	Break
3:15	Review of interviewing techniques

Day 2

9:00 a.m.	Discussion of previous day, reading materials, and manual
9:30	Content of questionnaire; clarification (question by question review)
10:30	Break
10:45	Tasks before the interview: Locating and contacting clients; arranging time and place for the interview; dealing with difficult situations
11:30	Role-play interview (trainees play both roles)
12:30 p.m.	Lunch
1:30	Discussion of role-play and interviewing techniques
2:00	Revision of questionnaire (if necessary)
3:00	Break
3:15	Survey Administration: Record-keeping; editing questionnaires; checking for completeness

Day 3

9:00 a.m.	Role-play interview (from initial contact to editing questionnaire)
10:30	Break
11:00	Discussion, comparison of recording for reliability
12:30 p.m.	Lunch
1:30	Scheduling the field test (pilot study)
2:00	Role-play interview
3:00	Break
3:15	Discussion of interviewer attitudes and expected problems (e.g., safety, burn-out, bias, hostility from respondents, feelings while interviewing)

Day 4

9:00 a.m.	Role-play interview (comparison of recordings)
10:30	Discussion of reliability and accuracy
11:00	Break
11:15	Interview critique from trainer to individual trainees
12:00 p.m.	Lunch
1:00	Review of procedures -- Confidentiality and forms (clarification if necessary)
3:00	Field-test assignments*

*A field test is conducted soon after training. Trainees return as a group to discuss the experience, review completed forms, and make necessary revisions in the procedures. Chapter V discusses field testing procedures, also known as a pilot study.

APPENDIX C

SAMPLE INTERVIEWER MANUAL[1]

Role of the Interviewer

The role of the interviewer is to obtain information. When the interview is completed and the participant has requested assistance or services regarding problems covered in the interview, the interviewer may then suggest or refer the client to an appropriate person or service. Even at the end of the interview, the interviewer's role will not be one of a counselor, but one of an agent or resource person.

While this type of interview is not designed to penetrate deeply into the personality of the respondents or to change them in any way, it is possible that their awareness of themselves will be heightened. It is important that the interviewer be sensitive to the client's problem areas and aware of local resources that may be appropriate to the client's needs.

The role of the interviewer is crucial to this project. Without valid, reliable data collected by the interviewers, the results of the study will be worthless. To this end, it is important that the interviewers not be seen as agents of the program, but as someone who is neutral and can be trusted with honest feedback.

Confidentiality and Privacy

Interviewers are required to protect the confidentiality and privacy of all participants involved in the study. Each participant and her/his family is to be treated with respect and dignity, as is all information they provide in carrying out this study. There are several general rules to follow to prevent breaches in confidentiality and privacy:

1. No personally identifying information will be on any questionnaire or form submitted to the data collection office.

2. Use all precaution necessary to prevent loss or theft of completed forms. At home, keep forms in a safe place.

3. Do not allow anyone other than project staff to read completed forms.

4. Do not discuss participants with anyone other than project staff.

5. At your workplace, keep all personally identifying information and completed forms locked up when not in use.

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[1]This manual contains study specific information that may not be applicable to other follow-up projects.

Initial Contact

Your first contact with potential participants will be either by phone or in person. This is a critical time and the interviewer must keep several important aspects in mind, since the potential participant's first impression may influence his/her perception of you and the study.

The success of being granted an interview (and successfully conducting the interview) depends considerably on the interviewer's ability to create a friendly, non-threatening atmosphere of mutual trust and confidence. Because the conditions of each contact are varied, there is no single "right" way to establish rapport. Interviewers must be sensitive to the uniqueness of each situation, and respond accordingly.

There is, nevertheless, necessary information to share and certain principles to follow that are likely to bring about rapport. The following information should be given in the first conversation:

1. Identify yourself and who you are working for.

2. Describe the purpose of the study. The purpose of the study should be stated broadly. A general statement on the study with emphasis on the importance of their thoughts and opinions will usually suffice.

3. Explain how the information will be used. Assure the participant that the information given will be seen only by the study staff and that in reporting findings no names or identifying information will be used. Also, make clear that the study is being conducted independently from the program staff operations.

4. Participation is voluntary. The participant should feel free to withdraw his/her permission at any time; however, emphasize that they can contribute important information we need, that this is an important study and they would be helping us.

5. Explain what is expected of the participant. Make it clear that the appointment will be made at their convenience. The time of the interview should be no more than one hour; it is better to over-estimate the time allotment than underestimate it.

Scheduling by Phone

When someone other than the participant answers the phone, caution and discretion must be exercised. Confidentiality must be the primary consideration. The main concern is that no one should know, without the express permission of the client, that the client was in a chemical dependency program.

If the person answering the phone is definitely known to be an immediate family member (spouse, parent, etc.) living at the same residence, it might be acceptable to identify yourself as someone conducting a survey. Do not, however, volunteer this information but offer it if it appears to be the only way to get the participant to come to the phone.

If the interviewer is calling other persons when attempting to locate a participant, do not give any information that reveals that the client has ever been in a chemical dependency program. The interviewer may say she/he is working for the State of Minnesota, interviewing people who have used various state services, but do not mention the program by name. State only that the person you are trying to locate has been drawn in a sample and that you would like to talk with this person to ask if he/she would be willing to be interviewed.

Other Considerations

People may be reluctant to grant an interview for a variety of reasons: they feel they are too busy, they may believe the interviewer is from some other State agency such as Corrections or Revenue, they may feel embarrassed. If interviewers sense this reluctance, they should be clear about the nature of the study and emphasize the importance of former clients' participation.

An interviewer should not attempt to interview a participant whom they know (relative, friend, acquaintance). This situation could be uncomfortable and bias the interview data. If the interviewer has prior knowledge of the participant or her/his family, contact the coordinator to have this interview reassigned.

If, in the course of the interview, you have reason to be concerned for your safety, do not prolong contact to complete the forms. Excuse yourself as tactfully as possible and report this to the coordinator. One of two alternatives will be decided: (1) to assign two interviewers as a team to see the participant; (2) to remove this person from the interview sample.

Interviewing Techniques

1. Create a neutral atmosphere.

   The most important criterion in an interview is the validity of the participant's responses. Many people will respond with what they think the interviewer wants to hear or what they think the "right" answer should be rather than giving a true answer. This makes it extremely important to respond neutrally by showing no signs of approval or disapproval, whatever is said.

1. Body language should be relaxed.
2. Facial expression should be pleasant.
3. Verbal responses that are appropriate are: "I see," "Uh huh," "OK, I've got that." Avoid expressions such as "good," "fine," "oh no," and other slang terms of approval or disapproval.

2. Display interest.

   Without becoming too friendly, do not appear cold or distant -- possibly a "detached interest." Maintain eye contact when the person is responding.

3. Behavior of the client.

   It is permissible for the interviewer to indicate disapproval of the participant if he/she is uncooperative (or approval if very cooperative). To discourage uncooperative behavior, use a straightforward remark such as: "The interview will take longer if you will not (stay in the room) (pay attention)."

4. Communicate that the interview is important.

   Participants are more likely to cooperate if they believe the interview is serious and purposeful. This may be conveyed by:

   1. How the study is explained initially.
   2. The interviewer's conduct and attitude (verbal and non-verbal).

5. Make it clear that the <u>respondent's answers</u> are important.

   Respondents may feel that they are different from the "norm," or that their extreme opinions will ruin the study. The interviewer should convey that no matter what the situation, all answers are important, thus increasing cooperation.

6. Request a quiet place for the interview.

   This will help emphasize the importance of the study. If a phone interview is granted, request that the participant eliminate distractions before beginning the interview.

7. Conduct the interview privately.

   It is definitely preferable to conduct the interview in private. The presence of even one other person may influence the respondents' answers, and therefore bias them.

8. Difficulty in responding to questions.

   Be alert to problems a client may have in responding to the questions, if:

1. English is not their first language.
2. A learning disability, visual or auditory handicap is present.
3. Their educational level is low.
4. They are confused due to senility, brain damage or medications.

The interviewer should then pace the interview and gear his/her vocabulary to facilitate the understanding of the client. In severe cases, it may be necessary to forego the interview completely.

9. Clarification to respondent.

When a question is not understood, misunderstood or misinterpreted it should be repeated, not paraphrased. Pose the question more slowly or begin by saying, "Let me say it more clearly," or "I see," and repeat the question.

NOTE: A respondent may say "I don't know" to a question he/she does not understand. Though sometimes genuine, this response should not be accepted right away at face value. Repeating the question or probing may be successful in bringing out a more valuable answer; however, do not force an answer.

10. Hesitation or refusal to answer questions.

Questions which respondents hesitate or refuse to answer immediately should be handled tactfully in order to keep rapport. The interviewer should use the introductions supplied on the questionnaire in a casual manner, without concern about the sensitivity of the question. In other words, there is no need to prepare the client for a particular question as it would only serve to make them feel defensive or uncomfortable.

NOTE: Part of maintaining a relaxed and neutral atmosphere is the ability to ask the questions in a natural, matter-of-fact way; not appearing to read too closely to the format. If the client is still hesitant, you may remind his/her of the anonymity of his/her answers.

11. Identifying inadequate responses.

The interviewer must understand the objectives of the questions in order to identify unclear, incomplete or untrue answers given by the respondent. When there is a need to pursue a suspect answer the following rules should apply:

1. Probes must not suggest reponses.

2. Acceptable probes in cases of contradiction or unclear responses are:
   a. "Earlier you said..."
   b. "Could you say more about the fact that..." (repeating the response)

NOTE: Maintaining rapport may necessitate reminding the respondent that there are no right or wrong answers. An irrelevant answer will also require a probe to elicit a more appropriate response.

12. Probing with precoded questions.

With precoded questions, probing is used to focus the respondent's attention to the question or direct him/her to the existing categories. In all cases, when the answer does not correspond to a category, it should be recorded verbatim before it is probed.

Answers "between categories"

For example: QUESTION: How would you rate your health--excellent, very good, good, fair, or poor?

ANSWER: It's OK.

When this situation arises, the interviewer should repeat the question (indicating to the respondent that they must choose one of them) by 1) repeating all categories to avoid narrowing the respondent's choice, 2) prefacing the repetition with some remark. For example, the interviewer might say, "Well then, would you say---" or "Which comes closest" or "In general,---." (Never just rattle off the question again.)

If the respondent should say, "It depends," then a remark such as "In general,---" is appropriate. On the other hand, if the respondent uses his/her own words instead of a category, then "Which comes closest" is best.

13. Probing with open-ended questions.

Open-ended questions are used when the full range of possible answers is not known by the researcher. Consequently, it is particularly important to get complete information from the respondent. Two kinds of probing are required: 1) for clarity and 2) for additional information.

The first task of the interviewer is to evaluate the answer to be sure it is understood in writing, not only by the interviewer but also by others who will analyze the data. If it is not clear, the interviewer must decide to probe for a better understanding. It may mean asking for a more specific response or for an explanation of a term.

Probes for clarity tell the respondent what the interviewer needs to know, such as: "What do you mean _____?" and repeating the response, or "I want to be sure I know what you mean here." After the answer is clarified, give some indication that it is understood, such as "That's the kind of specific information I'm looking for."

Remember: It is important to be sure to probe to the point of the question, and not ask for superfluous information, or reasons for reasons.

When probing for additional information, repeating the substance of the question with a request for further information is appropriate. For example: "What else do you like about _____," or "What other reasons did you have _____."

The probe "What else?" should not be used, because it tends to sound too mechanical and the respondent may get sidetracked. "Is there anything else?" should be avoided because it is a leading probe that can be easily answered by a NO.

Never probe until the respondent says, "That's all." The point is to probe until the respondent really has nothing else to say.

14. Closure of the Interview.

    1. Review the questionnaire quickly to see if there are any skipped (unanswered) questions before ending the interview. With the exception of those questions that are not applicable, all questions must be answered.

    2. Extend thanks to the respondents for their participation and appreciation of the time they gave to the study.

    3. Comments on conduct of the interview may be recorded after contact with the client has ended. Note problems or circumstances that may have influenced the interview on the last page of the questionnaire.

    4. Editing of the questionnaire should be done in pen (if original recording is in pencil), as soon after the interview as possible. Check each question to be sure that the answers are correctly checked or circled, written answers are legible and abbreviations are spelled out. Never erase an answer, either during or after an interview. Never fill in any information based on what you think a respondent might have said (the errors made using this latter "judgment" are greater than incorrect recordings during the interview).

Scheduling Participants

The purpose of the original letter is not only to inform the client of the study but to also assist in scheduling an interview. It is quite likely, however, that many people will not return the scheduling portion of the letter within a reasonable time period. Therefore, it will be necessary to make another attempt to reach them. If phone numbers are available, the client should be called to see if he/she received the letter. The interviewer should try to get a verbal agreement to participate in the study as well as set up an appointment for an interview. If at all possible, try to avoid tentative arrangements. A commitment to a specific time and place is more apt to produce an interview, than a promise to call you back.

For those clients who do not have listed phone numbers, a reminder letter should be sent approximately two weeks after the first letter has been mailed. The interviewers will be responsible for designing a short note, requesting an immediate response. The urgency should relate to scheduling within a given time period, due to the relatively short time in which we have to complete the study.

When the scheduling portion of the letter is returned and it indicates a positive response to participate, the interviewer will respond as quickly as possible. They will naturally have the first priority of the interviewer.

The client roster will be used to indicate the progress of returned letters, undelivered letters and scheduling of interviews. It may be necessary for an additional notebook or card file to record contacts, lead information and time spent on each client. The interviewers are encouraged to design a comfortable system for themselves that will provide the needed status information for each client.

As clients are contacted and responses received through the mail, status information will be recorded in the roster and the summary sheet. The categories will include the following:

Summary sheet:

1. Number of clients contacted--contacted in person and scheduled or mailed a questionnaire.

2. Interviewed--completed interviews (mail or in person).

3. Refused--said no to interviewer or in the mail.

4. Ineligible--client in treatment, prison, etc.

5. Deceased or incapacitated--long-term hospitalization, etc.

6. Unlocatable--after all leads have been tried.

7. Open or scheduled--interviews not completed but scheduled or clients not yet reached.

The clients from whom nothing is heard (meaning no forwarding address or other lead) will be shown as open until the end of the study. We will assume the letter reached them unless it is returned. Reminders may be sent periodically to try to obtain a response.

The number of completed interviews should be broken down on the summary sheet between phone, in person and mail interview, during a week. A monthly total of all categories, including the number still open at the end of the month, will be submitted to the evaluation office.

NOTE: The number of clients contacted means only those who may be categorized, i.e., refused, interviewed, etc. Everyone else will be considered "open or scheduled." At the end of the month the number contacted plus the number open should equal the total of the sample.

Average Time Per Interview

Each interviewer will spend a certain amount of time to collect data, contact clients, travel (when necessary), and interview. A record of time spent on each client who has completed the interview will be entered on the roster (log).

CHAPTER VII. THE PREPARATION OF DATA FOR ANALYSIS

by

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One of the most difficult tasks of the researcher is preparation and analysis of the data. This phase of the follow-up study requires a full understanding of the study design and the methods used to collect the data. To a large degree, this task will depend on how well each of the previous research steps have been performed. The results of any statistical analysis can only be as accurate as the data collection techniques. If interview questions are ambiguous or the original purposes of the study are not clearly stated, the task of analysis will be difficult, if not impossible. In a well planned follow-up study, the methods of analysis will have been designed at the onset of the project, not after the data have been gathered.

PLANNING THE ANALYSIS

Planning the analysis goes hand-in-hand with planning the interview questionnaire. Both are dependent upon the defined purposes of the study. Questionnaire items are designed to answer specific questions posed by the study. They are also designed to enable a specific type of analysis. In other words, performing a statistical analysis will depend on the series of steps that have been incorporated into the questionnaire.

One of the first decisions to make in planning an analysis is whether or not to use a computer. In small studies with relatively few

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cases and questions, the use of a computer may be unnecessary; however, some analyses are quite complex and would require extensive time to do the necessary arithmetic by hand. In large studies with hundreds of cases and variables, it may not be possible to do an analysis without a computer. The cost of computer time has steadily decreased in recent years and will probably continue to do so. A typical two-page questionnaire can usually be analyzed for under ten dollars of computer time. (Of course, the exact cost will depend upon the complexity and extent of the analysis, as well as the number of cases and variables involved.) The major costs of computer analysis are in preparing the data for analysis (coding and keypunching) and hiring a computer programmer.

There are several packaged computer programs that have been designed particularly for social science research. The most commonly used is SPSS (Statistical Package for the Social Sciences).* It has been developed to accommodate a large variety of research methods and will provide the user with a fast, comprehensive analysis. Unfortunately, the successful use of SPSS requires either an experienced programmer, or considerable time to learn how to use the program. Still, it can reduce the amount of time needed for analysis from months to days.

PREPARING OPEN ENDED QUESTIONS FOR ANALYSIS

Preparing data for analysis can be either a time consuming task or a relatively easy task, depending on how well the analysis was planned before the data were collected. If a questionnaire was "thrown together," the time needed to prepare the data will be considerable. On the other

*Norman H. Nie, et. al., Statistical Package for the Social Sciences, McGraw-Hill, Inc., 1970.

hand, a well planned questionnaire will reduce this time to a minimum.

Good analyses are both descriptive and inferential. They describe the sample and allow inferences to be made about the population. That is, they should allow a summary description of the sample in terms of typical responses and variability, and they should allow use of standard statistical "tests of significance" to yield estimates of what is likely in the larger population.*

Open-ended questions present especially difficult problems in analysis. Since each respondent used his or her own words to answer the questions, it is unlikely that any two respondents answered the same question in exactly the same way. A question asked to 100 different people may elicit 100 unique answers. While a review of the verbatim responses may be valuable in itself, it is more meaningful for summary purposes to combine the responses on the basis of common response themes. The task of developing appropriate response categories for open-ended questions is difficult and time consuming. In addition, it allows the researcher's own bias to be introduced into the results.

For example, ten people were asked the question: "When you have an emotional problem, whom do you usually confide in?" The following ten responses were received: 1) my girlfriend, 2) my mom, 3) my wife, 4) my sister, 5) my brother, 6) my doctor, 7) my Aunt Sally, 8) my lawyer, 9) nobody, 10) my husband.

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*This chapter cannot explore the variety of procedures used in the actual analysis of data. The reader is referred to the following textbooks:

Guilford, J.P. Fundamental statistics in psychology and education. NY: McGraw-Hill, 1965.

Haber, A. & Runyon, R.P. General Statistics Reading, Mass: Addison-Wesley, 1969.

Response categories could be constructed in several different ways. One way is:

1 = Confide in member of the immediate family

2 = Confide in someone else

3 = Do not confide in anyone

This set of response categories might have been constructed by a program specifically interested in learning whether family participation in the program would create more trust in the client (as opposed to a non-family member). All the responses received could be easily coded into one of the three categories. The new categories could then be subjected to a statistical analysis.

It is imperative that all possible responses are codable into the available response categories. One way to assure this is to include an "other" category or "none of the above." A good technique for creating response categories to open-ended questions is to select randomly approximately 20 completed questionnaires. After creating response categories from these, another 20 questionnaires should be chosen for coding into the categories to test their applicability. If they fit well, the categories will probably be sufficient.

Creating categories for verbatim responses is basically a data reduction technique. In other words, very precise data (the actual verbatim responses) is being reduced into less precise data (the coded response categories).

NOMINAL, ORDINAL, INTERVAL & RATIO DATA

There are four different kinds of data. For illustrative purposes, the following questionnaire was developed to show the differences.

(1-3) ____ 1. Follow-up ID number

(4) ____ 2. Sex
1 = Male
2 = Female

(5) ____ 3. How often have you drunk alcohol in the last week?
1 = Not at all
2 = On one or two occasions
3 = On three or four occasions
4 = On five or more occasions

(6) ____ 4. Overall, how would you rate our program?
1 = Excellent
2 = Good
3 = Fair
4 = Poor
5 = Worse than poor

(7) ____ 5. How many years of school have you completed since high school?

(8-9) ____ 6. Age (in years)

This questionnaire is in a format conducive to a computer analysis. Key punchers will be able to work directly from the questionnaire itself. The numbers in parentheses represent the columns on the computer cards where the responses will be punched. There are several very important differences between these questions in terms of the kind of statistical summaries that can be done with each of them.

The first question is the client's follow-up ID number. The ID number is simply a substitute for the client's name. Its only use is to identify who completed the questionnaire. The number itself has no arithmetic value (i.e., Client 002 is not more of a client than Client 001).

The second question is similar. The respondent's sex is coded into a response category. The numbers 1 and 2 merely stand for a name (male or female), and have no arithmetic value in themselves. That is, a code two is not twice as much as a code one. No arithmetic operation on the numbers can be done except counting the frequency of each code. For example, a mean average sex cannot be computed. (i.e., The average sex of the sample is not 3/5 male and 2/5 female.) This type of data is called nominal. It contains valuable information, and proportions, percentages and rates can be calculated. Nominal data is often used to describe a sample. By counting all the cases that have a 1 in column four (males), and counting all the cases that have a 2 in column four (females), the sex composition of the sample will be known and can be expressed as an actual count, as a percentage of males or females, or as the ratio of males to females. The modal average (most frequent response) is also sometimes reported for nominal data.

The third item on the questionnaire ("How often have you drunk alcohol in the last week?") is somewhat different than the first and second items. On this question, the response numbers are ordered.* A person with a code 2 drank alcohol more often than a person with a code 1, and a person with a code 4 drank more often than a person with a code 3. The numbers however, do not indicate how much more. This type of coding (scaling) is referred to as an ordinal scale. The responses are ordered in a systematic way, but the numbers do not represent equal quantitative units. Ordinal scale numbers can be tricky. At first glance, it appears that an average frequency of drinking episodes could be computed by adding all the response numbers

*A good textbook on measurement, as opposed to statistics, is by Nonally, J. "Psychometric Theory." NY: McGraw-Hill, 1967.

and dividing by the number of cases. Closer examination shows that an average calculated with ordinal scale numbers will be quite misleading. Since the coded response numbers only show the relative order of responses, they cannot be added together (i.e., a person with a response coded as a 4 did not necessarily drink twice as often as a person with a response coded as a 2). The numbers are ordered (ordinal), but the intervals between the numbers are not necessarily equal. However, mode and median averages can be calculated for ordinal data.

Attitude scales are also usually ordinal data. Question four asked respondents to rate the program on a five point scale. Respondents' answers will not tell how much difference there is between two people with different responses. It would be inappropriate to compute a mean average rating for the question.

While the ordinal scale is very helpful to the researcher, it is lacking in the ability to quantify differences between responses. Some kinds of data can be scaled so that intervals between the response categories are known. Generally, if there is a unit of measurement for any piece of data, an interval scale can be established.

Item five on the questionnaire (How many years of school have you completed since high school?) is interval scaled. The unit of measurement is "grade level." It is considered interval scaled because the intervals between grade levels are equivalent. A response of zero would indicate that the respondent has not completed a year of school beyond high school. This "zero-point" is not an absolute number. That is, a zero on this scale does not indicate the "absence of education."

Item six on the questionnaire asks the respondents' age. The unit of measurement is "years." Unlike the interval scale of the previous question, the "zero-point" for this question is absolute. It can be said that response of 40 is twice as old as a response of 20 and a mean average age could be computed for the sample. This kind of scale is referred to as a ratio scale. Like the interval scale, each numeric interval represents one unit of measurement. Ratio scales also have the property of an absolute "zero-point."

When possible, ratio scaled questions are preferrable in research design, since they offer the most versatility in the kinds of analyses that may be performed. Often, ratio scaled data will be recoded to an ordinal scale for the purpose of analyzing and reporting the information. It's usually much easier to make sense out of the data when presented in an ordinal scale. For example, it may be more desirable to recode the respondents' ages to the ordinal scale: 1=under 21, 2=21 or older. It is easier to understand a summary based on these response categories than a list of all the ages and how many people are each age.

Recoding any data into new response categories is a procedure that should be approached with caution. Since it is basically a data reduction technique, it is possible that the recoded responses will present a distorted picture of the true responses. Recoding data is another procedure in which researcher's bias can be introduced.

PREPARING DATA FOR NON-COMPUTER ANALYSIS

When a computer will not be used in the analysis, the depth of the analysis will probably be limited by time. The traditional method of organizing data for a non-computer analysis is to prepare a tabulation sheet on which the responses to each item for each person can be recorded. A tabulation sheet for the five item questionnaire is illustrated in Figure 1. Each case requires one row on the tabulation sheet and each variable (questionnaire item) requires one column. These columns are not the same as computer card columns.

Using a tabulation sheet consists of counting the appropriate cells for each case. Calculations using this method are surprisingly fast when there are few items or cases. On the other hand, it is somewhat limited in its applicability to crosstabs or subgroup analysis.

FIGURE 1

ID #	Sex	How often drunk	Program rating	Educ. past High school	Age
001	2	1	1	0	17
002	2	3	2	1	29
003	1	4	5	3	31
004	2	2	2	4	58
005	1	3	3	4	43
006	1	2	4	0	38
007	1	4	5	0	27

PREPARING DATA FOR A COMPUTER ANALYSIS

Preparing data for a computer analysis is a relatively easy task and can be performed by someone who has had no previous experience with computers. In a well planned study, the questionnaire itself will have been designed so the data can be keypunched directly from the questionnaire onto computer cards. If the questionnaire was not designed to facilitate keypunching, a lot of time will be needed to transfer information from the questionnaires to a computer coding form. This is usually a tedious process. The implication is clear: A little extra effort in questionnaire design will mean a big savings in preparing the data for analysis.

Most modern data processing services now have the equipment to "key to disk" rather than keypunch computer cards directly. The "disk" is a mass storage device. If a mistake is made in keypunching (on computer cards), it is necessary to repunch a new card completely. If a mistake is made when "keying to disk," it is an easy matter to correct it. When all the data has been entered and stored on disk, computer cards can then be punched quickly and accurately.

It is always important to have data "punched and verified." During the verification process, errors will be detected and corrected. After spending a large sum of money on the collection of the data, it would be foolish to jeopardize the reliability of the information by not having it checked. Good research design dictates data verification. Data card punching and verifying costs between 5 and 10 cents per computer card.

When data is being prepared for computer processing, it must be structured in a form that a computer can understand. The computer card

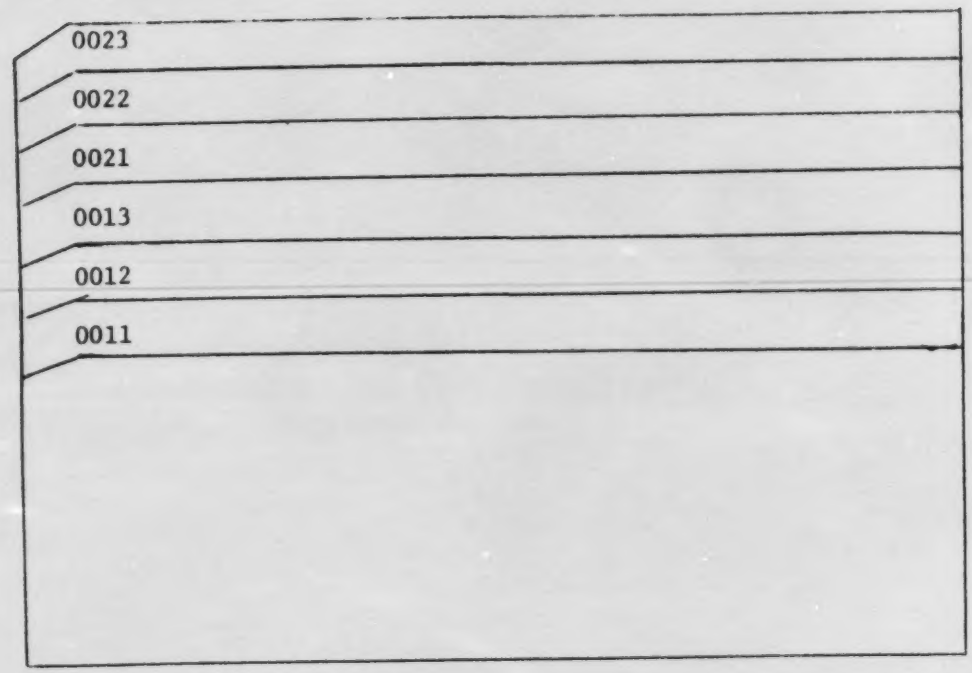
is an aid for helping convert written questionnaire information into computer information. Computer cards contain 80 columns, each capable of holding one character of information. This character may be alpha (A-Z) or numeric.

Each item on the questionnaire will require at least one column on the computer card, and some questionnaire items will require more than one column. For example, if the questionnaire asked the respondents' age, two columns on the computer card would be reserved for this item. This would accommodate all possible ages to 99 years. The number of columns required to hold a variable is called the "field length." The required field length for age is two. Another example where two columns would be necessary is when there are ten or more response codes for a particular item. On the sample questionnaire, the numbers in parentheses are the column numbers where the responses will be placed on the computer cards.

Each case is begun on a new card. If the questionnaire requires more than 80 columns, it is continued on another card. It is customary (but not necessary) that the beginning columns of each card contain the case ID number and the card number for that case. This would allow the cards to be sorted if the card deck is dropped or becomes misordered.

Figure Two shows the first two cases of a questionnaire that requires two and a half cards per case (200 columns). Columns 1 through 3 on each card are the ID number and column 4 is the card number. The second case is started on a new card even though there are unused columns remaining on the third card.

FIGURE 2



There are several questionnaire formats conducive to keypunching. Most have two characteristics: 1) the column numbers for each question are printed on the questionnaires themselves, and 2) the completed questionnaires will have the responses in a column so the keypuncher will be able to look down the page in a straight line, rather than zigzagging back and forth across the page. This will help reduce the keypunching error rate. For an extensive discussion on questionnaire design, the reader is referred to Questionnaires: Design and Use by Douglas Berdie and John Anderson (Scarecrow Press, Inc., 1974).

If a questionnaire was not designed to be directly keypunched, the information must be transferred from the questionnaire to an intermediate coding form, which in turn will be used by the keypunchers. This step is time consuming and highly susceptible to error. The entire

reliability of the study is dependent on the accurate transfer of information from the questionnaires to the computer coding forms.

A computer coding form resembles the format of the computer card. There are 80 columns on each line of the form. (Each line will be punched on one computer card.) As mentioned earlier, the major problem with transferring information to coding forms in accuracy. Coders will need to be hired and trained to perform this task. The primary requisites for this job are attention to detail and endurance. It is imperative that response codes are written in the proper columns on the coding form. Skipping a column will lead to disastrous results. It is therefore extremely important to spotcheck coders' work. If a coder misunderstood the instructions, spotchecking his or her results will detect this and prevent future headaches. It is also a good idea to reserve a column for the coder's ID number. If this is done, it will be possible to identify the coder for each questionnaire, and thus allow an easy check and correction procedure for consistent errors by a particular coder.

MISSING DATA

Missing data is often a problem in survey-type studies. For example, in a written questionnaire, 100 former clients were asked: "Did our program help you to make any good changes in your life?" The response categories are: 1=yes, 2=not sure, 3=no. In the sample, 45 respondents answered yes, 15 clients said they weren't sure, 10 said no, and 30 left this question blank. How to interpret these results is a difficult problem. The 30 who left this question blank could sway the results any direction.

The first thing that should be done when large amounts of missing data are encountered is to try to obtain the data. While contacting each respondent who left this question blank may seem like an extreme measure, it may be the only way to make sense out of the data. Of course, the amount of effort that goes into getting the missing data will depend upon the importance of that particular question to the study.

Often, it will not be possible (or practical) to contact the respondents for the excluded data. This will especially be true when a study is constrained by time or budget. If this is the case, confidence in the results will be diminished.

Generally, there are two ways of reporting results that contain missing information. The first method is to create a new response category for those who didn't answer the question. (in the example, 4=no response.) Statistical calculations are based on the total sample N, and missing data is treated as if it were another response category. No assumptions about why the data is missing need to be made. Using this technique, the results might be presented as:

45% Yes

15% Not sure

10% No

30% No response

In interpreting these results, the researcher would still look for the reason so many responses are missing, but would not exclude those people from the analysis. This technique is particularly suited to nominal and ordinal data. If the sample is not significantly different from the population from which it was drawn, a similar amount of missing data would be expected from other samples of the population.

The second method of reporting missing data can be used with any type of scaling. The data for the question is summarized as if the sample size were equal to the number of people who answered the question. (In our example, the sample size for this question would be 70.) The percent of people who answered yes to this question would be calculated as 45/70 x 100 = 64% (rather than 45/100 x 100 = 45%). The results of this question might be reported as:

64% Yes

21% Not sure

14% No

Response rate = 70%

When the data is interval or ratio scaled, this technique is often carried one step further. The mean average of the completed sample is calculated and all missing data is given this value. The mean is then re-calculated using the total sample. It is important, when using these techniques, to report either the response rate or the actual number of

missing cases. This will give other people an idea of how much confidence they can place in the data. Response rates of less than 90% are generally considered low, and decisions based on low response rates should be made with caution.

BRANCHING

Branching in a questionnaire means that respondents are asked different questions depending on how they answered previous questions. The simplest form of branching is illustrated in the following example:

1. Have you drunk any alcohol in the last month?
   1=Yes
   2=No

2. If yes, how many times?
   1=On one or two occasions
   2=On three or four occasions
   3=On five or more occasions

Question #2 will only be answered by those who answered "yes" to question #1. If there is no missing data, then the number of respondents to question #2 will equal the number of people who said yes to question #1.

Branching can present problems in an analysis if there is missing data. This is especially true when data is missing from the question where the branching occurs. In the sample questionnaire, if question #1 has missing data, then there will be no way to determine how many respondents should have answered question #2. Because of this potential problem, branching should be avoided when possible. It is more desirable to phrase questions so they can be asked to all respondents.

In conclusion, good research design requires planning the analysis simultaneously with the questionnaire, so that most analysis problems can be prevented.

CHAPTER VIII: REPORTING AND USING THE RESULTS OF A CLIENT FOLLOW-UP STUDY[1]

by

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The previous chapters considered the planning and execution of a client follow-up study, from formulating the study objectives to preparation of the data for analysis. This last chapter considers the final steps: writing an evaluation report, and using the results.

First, a format for presenting the results is shown, as borrowed from traditional "science reporting." The uses of narrative, tabular presentation, and graphic displays are discussed.

Next, several "uses of follow-up" as previously cited in Chapter 1 of this Handbook are re-introduced to show what can be done with the evaluation report. Several issues from the evaluation subspecialty called "knowledge transfer" or "utilization of results" are presented to show sources of organizational resistance to change, along with a few recommendations to the evaluator.

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[1]This chapter of Evaluation Tools and Procedures was produced under contract #29055-29056 to the Minnesota Department of Public Welfare. This chapter was edited by Sue Weber, Judie Steiner, and David Walonick, of Rainbow Research, Inc.

WRITING AN EVALUATION REPORT

The results of the follow-up study should be written up, along with the procedures used to conduct the study. Written presentations of the research projects typically contain several standard sections: Introduction, Method, Results, Discussion, and Summary. A number of issues should be addressed within each section.

Introduction

The Introduction to the report should describe the context of the study. It should describe the program under study, including the program clientele, the specific services that define the program, and the program's treatment philosophy. The more detail that is provided in describing the program, the more easily the reader can understand the type of program which the results describe. Without this detail, the reader cannot know to what types of programs or clients the results might be applicable.

The Introduction should also describe why the study was undertaken, and under those sponsorship. The specific purposes of the study should be listed. The section could discuss similar studies or studies previously done with the program, and other historical information that might help to give further context to the study.

Method

The Method section should document the procedures used to conduct the study. The ideal is to include enough detail to allow other investigators to conduct an identical study of another program, or at the same program in the future. At a minimum, it should be detailed enough to allow readers to understand how the data were collected and analyzed.

The Method section also should describe how the sample of clients to be followed-up was chosen. It should explain what types of clients were eligible for participation and how clients were chosen.

Since not everyone on the sample list will actually provide data, an accounting of sample attrition should be given. This would include a breakdown of reasons why people in the original sample were not among the final sample. Reasons could include "coult not locate," "refused to participate," "institutionalized," "lived too far away," "deceased," "unreliable interview data," etc.

The method for contacting clients and the information they were given prior to their participation should be discussed, along with steps taken to assure the client's privacy and the confidentaility of the data.

A description of the data collection instrument, whether a written questionnaire or an interview form, should be given. If the instrument was a standard one, or used in other studies, its name and availability should be given. If the instrument was "homemade," a detailed description of its development is needed, and a copy of the instrument itself should be included as an Appendix. At the least the questions should be included in the test, perhaps as part of the Results section. Individuals or groups of people who participated in constructing the instruments, or other parts of the study's design or implementation, should be mentioned too.

If data were collected by interviewers, the Method section should describe the interviewers' relation to the program, and any special skills or qualifications they brought to the job. A description of the training or orientation they received is needed. The "set and setting" for the interview transaction should be described. If data were collected by

mailed questionnaires procedures used for reminding clients to return questionnaires, and the success of these procedures should also be discussed.

Results

The Results section should present analyses and summaries of the collected data in a way that is responsive to the study objectives. One of the most difficult tasks of report preparation is settling on the "right" format and level of detail in which to present results. Ultimately the decision is based on one's understanding of the needs of the different audiences of the report.

One could present a summary of the results of each question on the instrument. This could take the form of a frequency distribution, showing the number and percentage of the sample that answered the question in each of the response categories, and could be broken out further by giving the frequency distributions for different population subgroups. For example, the responses to a question could be shown separately for males and females, or for people discharged one year ago and five years ago.

As further examples, one could present all the data for one subgroup first, and then another. Another option is to present all the data according to component of the program. Still another is to present the data according to the original study objectives. Obviously, different combinations of the above arrangements can be designed. (See Figure 1 for an example.)

A well-constructed table is an economical way to present data, and can allow the reader to perceive relationships that might be missed if the results were reported in strictly narrative form.

A good table supplements the text. Similarly, each table should be integrated into the text. The text should state the highlights of a table, rather than all the detail. Each table should be intelligible without reference to the text. It should have a clear title, each of the columns and rows should be clearly labelled, the units or numbers reported in the table should be identified, the sample size should be given, and qualifications or exceptions should be presented as footnotes to the table. (See Figure 2.)

Each table should be numbered, and referred to by its number in the text. If the same table format is to be used repeatedly, it is usually wise to mock up a prototype so that headings, labels, and terminology can be standardized to facilitate comparison among tables and to avoid confusion.

Data presented graphically, rather than in tabular or narrative form can greatly aid understanding of the data. A visual expression of data adds meaning or emphasis to a strictly numerical or verbal presentation.[2]

The most common and simplest forms of graphic presentations are pie charts, bar charts, and line charts. The pie chart (See Figure 3) is a circle whose area is divided into segments. It is especially useful for showing the relative size of the segments, and for comparing the segments to the total. It is effective for displaying how a total group is made up of smaller groups. Pie charts with too many pieces can be confusing, they are often difficult to label clearly, and comparison of several pie charts can be clumsy and imprecise. They are effective visually, but should be used sparingly.

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[2]An excellent handbook on the visual expression of data is by Mary Ellen Spear, Practical Charting Techniques, published by McGraw-Hill, 1969.

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QUESTION: Do clients say the referral was helpful?

ANSWER: At follow-up, the question was asked, "Did it do any good to go to the place or places suggested by the counselor from the program?" Results are shown in Table 5, in the right panel, for both internal and external referrals.

-- For those who acted on the referral...
...52% said it was "a big help"
...39% said it was "some help"
....9% said it was "no help"
....3% said it did "more harm than good"

-- Forty-eight percent of clients with problems related to their own use found the referral "a big help." Fifty-five percent of those with problems related to someone else's use found the referral "a big help." Forty-eight percent of those with problems unrelated to chemical use found the referral "a big help."

-- Of those who felt pushed or forced to use the Governor's Bill program, 27% felt that the program's recommendation for further assistance was "a big help." Fifty-nine percent of those not pushed or forced felt the referral was "a big help."

-- People who finished the recommended program, or were still receiving services at the time of follow-up, were more likely to find the program "a big help" (62%) than were people who left before finishing (27% of these said it was "a big help"). Fifty-three percent of the people who said the program was "no help" left the service before completing the program.

Figure 1. An Example for Presenting Results. From Client Impact Study of Chemical Dependency Prevention and Early Intervention Programs for Special Populations. Volume I: Results for the Total Sample. Minneapolis: Rainbow Research, Inc., 1979

(6)

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Table 8

Mean Number of Correct Responses on Verbal Tests by Children With and Without Pretraining

Title explains group names

Group	n[a]	Grade 3	Grade 6
Girls			
With	20 (18)	280	319
Without	20 (19)	240	263
Boys			
With	20 (19)	281	317
Without	20 (20)	232	262

Note to table gives total score for comparison with entries in table.

Note. Maximum score = 320.

Footnote to n column explains use of parentheses.

[a]Numbers in parentheses indicate the number of children who completed all tests.

Figure 2. Example of a well-constructed table. From Publication Manual of the American Psychological Association, 2nd Edition. Washington, D.C., APA, 1974.

A bar chart (See Figure 4) is useful for comparing different items at a given time. For example, one could display proportions of different populations of people who report a particular outcome or event, or the cost of different items or services at a given time. It effectively displays the relative magnitude of different classes, and is userul when there is no need to compare the different items to the whole (in which case a pie chart might be better). It is also possible to compare two groups, or sometimes three, using bars that are coded by different shadings.

A line chart (see Figure 5) is also an effective way to express data. Typically, it is used to show how some quantity (cost, numbers of people, outcome rates) change over time. It is especially useful a) to show change over a long period of time (five or more units of time), b) when several series can be plotted simultaneously (like numbers of admissions and numbers of "successes"), c) when the emphasis is on the rate of change more than the actual amounts.

Discussion

The Discussion section of the report should contain an assessment or interpretation of the results, especially with respect to the study's objectives. It could contain a summary of how the study's objectives were met, or how the original questions were answered. Departures from original expectations should be noted. Similarities and differences between results of the study and results of other studies could be noted.

The Discussion section should also include the investigators' judgments of the validity and quality of the study's results. If the data are not as conclusive as originally expected, reasons should be offered.

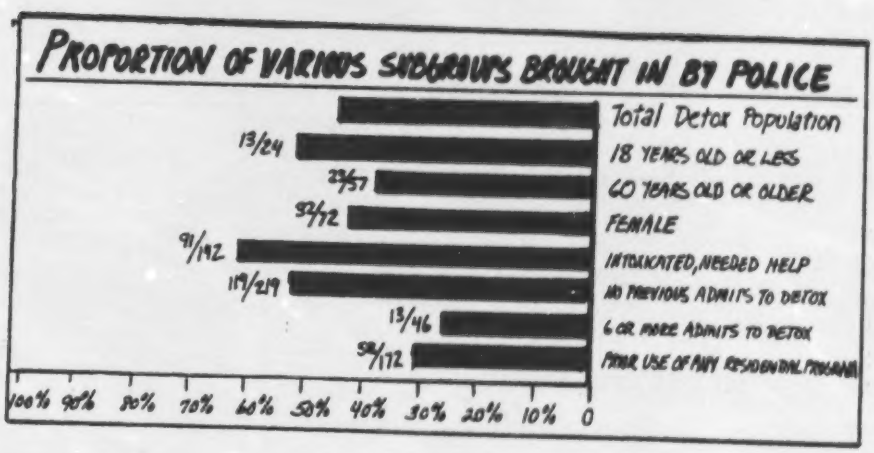

Figure 4. Example of a bar chart. From Client Impact Study of Six Detoxification Centers ("Sub-Acute Receiving Centers"). Minneapolis: Rainbow Research, Inc., 1979.

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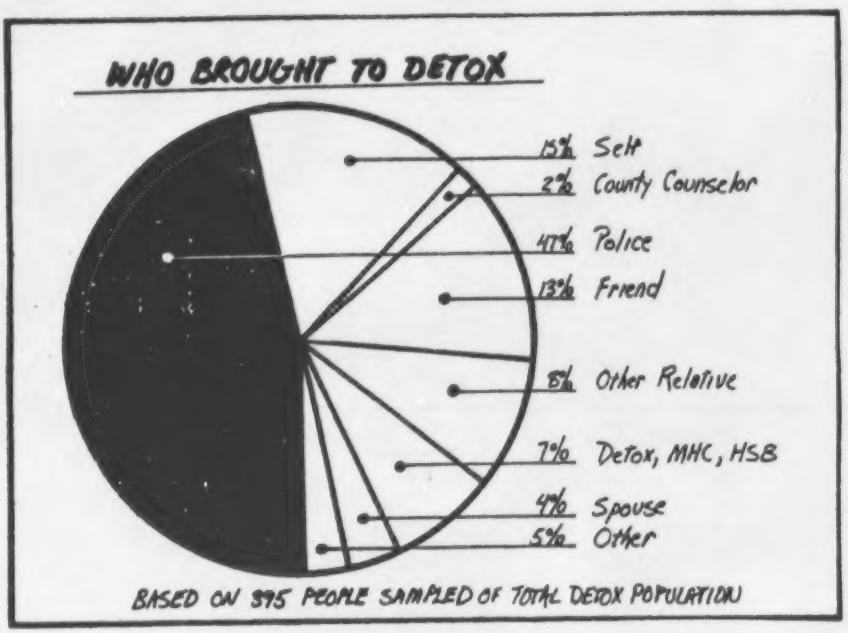

Figure 3. Example of a pie-chart. From Client Impact Study of Six Detoxification Centers ("Sub-Acute Receiving Centers"). Minneapolis: Rainbow Research, Inc., 1979

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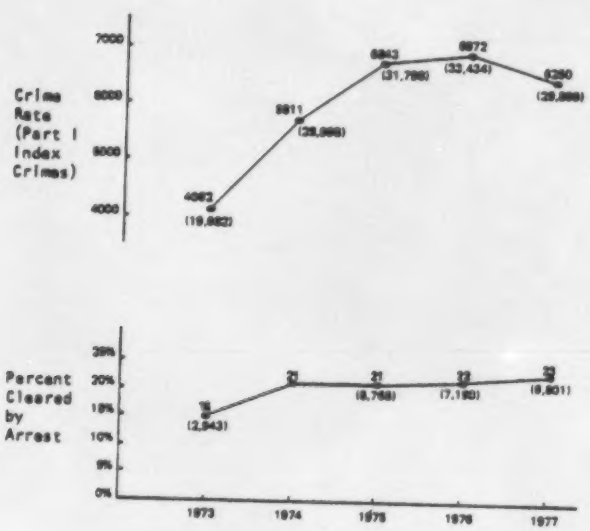
FIGURE 10

Crime Rates* and Clearance Rates for Part I Index Crimes in Ramsey County from 1973-1977



* Crime rate is expressed as the number of crimes per 100,000 population. The actual number of offenses for each year is enclosed in parenthesis. From the Minnesota Crime Information System Uniform Crime Reports 062; 1973-1977.

Figure 5. Example of a line graph. From 1977 Ramsey County Crime Analysis. St. Paul/Ramsey County Criminal Justice Coordinating Council, 1979.

Various sources of bias that may have entered into the sample ultimately interviewed, biases in interviewing or other phases of the data collection process, and biases in analyses should be examined.

Difficulties encountered in conducting the study should be discussed, to serve as a guide to future investigators. Difficulties from the standpoint of project administration, or study design and execution should be discussed.

The Discussion section is also the place to discuss any implications the study may have for changes in theory of chemical dependency, programming, or administration. It is usually difficult to decide how far from the actual data one can safely depart before entering the realm of speculation or personal attitudes. One should probably avoid polemics and vague theoretical wanderings, and instead be guided by the questions, "What has this study contributed? How has this study helped to resolve the original problem?"

How free one is to recommend particular courses of action is contingent on several factors. One is whether it is expected by the study's sponsor. Another consideration is the degree to which recommendations are inspired directly by the data, or by one's own judgment. Still another rests on the technical quality of the study; the data may look compelling, but be seriously flawed, making the base for policy change recommendations somewhat unstable.

The data may clearly indicate that a change is needed, but the exact nature of the change, or the mechanism for bringing about the change is probably not directly indicated by the data (unless it was deliberately

designed into the study). If recommendations for change are made, they should be supported by the presented data. The investigator should determine whether the report, or some other vehicle, is more appropriate for expressing recommendations for change.

Other approaches

There is nothing hard-and-fast about presenting an evaluation report in the sectioned format just discussed. It has worked well in scientific journals, and is probably workable for other audiences and settings as well. Certainly, the issues presented above do need to be conveyed somehow, regardless of format.

Many style manuals have been written to guide editorial consistency and quality. These are often published by a particular profession's association, or endorsed for use by the major journals of that profession. If one contemplates publishing the results of an evaluation research project in a professional journal, it is advisable to consult back issues of the journal to ensure that the format used will be compatible with publication requirements. It is often helpful to consult style manuals for helpful pointers on clarity, regardless of one's intent to publish.[3]

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[3]An example is Publication Manual of the American Psychological Association, 2nd ed. Published by APA, 1974. Also helpful is Manual of Style, University of Chicago Press, 1969; Style Manual, U.S. Govt Printing Office, 1973.

USING THE RESULTS

Chapter 1 presented several "Uses of Follow-up Studies." While these potential uses should have guided the planning and conduct of the study and the preparation of the report, now is the time to plan organizational responses to the evaluation findings. It is most likely that the report will not have touched on, or made obvious, all the ways in which a program can be improved, so that it will be necessary to expand and promote ideas from the report. Again, the responsibility for creating and promoting an organizational direction should not be assumed, but should be clarified early in the project and asserted as it becomes appropriate.

Follow-up as contributing to program evaluation

Are the program's objectives being met? Administrators should assess how their view of objectives-attainment is enhanced or modified by the evaluation. A major contribution of follow-up data is that they provide the client's perspective one that is probably less familiar than other, more customary (such as staff's) perspectives. While an evaluation study may not attest to all program objectives, there should be some conscientious staff work around the question, "What have we learned about our program's objectives from this study?"

Is there program impact of which the program was unaware? Unless the study design was extremely restrictive, there will probably be feedback from clients about topics that may be surprising. Some clients may have been effected in ways that were unanticipated by the program. The report should be scrutinized for impact the program did not know it had, and for new ways of describing impact, both good and bad.

What new evidence is there os the program's strong and weak points? It is quite possible that the feedback provided by the report gives an unfamiliar picture of the relative strengths of components of the program, or the relative impact on different areas of a person's life. Even though there is a tendency to read an evaluation report for the way it confirms or disconfirms one's prior expectations, one should try to learn what new knowledge about the program has been added by the report's assessment of strong and weak points.

Follow-up as contributing to program design

Many areas for improvement will probably be revealed in an evaluation report. Some will be revealed by direct feedback from clients. For example, upon learning that less than one-third of the people in a follow-up sample find the lectures or films on chemical dependency helpful or informative, a change in selection of films or lectures is indicated. Or, learning that women often find it humiliating to be forced to wear pajamas in a "co-educational" setting should be incentive enough to prompt a change in that practice.

Sometimes a shift in program emphasis is indicated by an analysis of the data. For example, it was discovered that in detox centers one of the few practices to be rated as highly helpful or supportive is the practice of including representatives of community groups or special population groups in the supportive care of the person in detox. This practice is presently uncommon, but should be considered for more regular inclusion in program practice. As another example, programs could very well learn that many of their former clients lead happy and productive lives even though they do not accept much of the program's philosophy. This

could suggest that the program could enlarge its definition of treatment success, as transmitted from counselor to clients in the program.

Follow-up as contributing to staff development

A major purpose of follow-up data is that they will provide knowledge of results to the staff. This is a primary ingredient to learning; without knowledge of results, one cannot improve one's practice. While counselors do not usually have the opportunity to get knowledge of results on a case-by-case basis (unless the counselor did the follow-up interview her/himself) there is opportunity to learn from aggregate data. By seeing the variety of ways in which the program is perceived and received by program clients, counselors will have more realistic expectations of the program's impact on clients.

An assessment of the program's strengths and weaknesses should lead to an assessment of training needs for program staff and administrators. Clients will often say directly what areas a counselor was weak in, or what areas the entire program ignored, or detail administrative complaints against the program, or comment on areas of insensitivity or incompetence. These should be converted into a plan for staff improvement.

Follow-up as contributing to discussion on "effectiveness"

A major product of a follow-up study is the way it can serve to provoke discussion on what is effective programming. Even though the report will not answer all questions about effectiveness, it will certainly have the effect of raising many questions which are better informed, given the new data. It could be revealed, for example, that standard notions of what is an "appropriate referra" are missing some important ingredients that are

revealed in the data. Or it could be that "quality sobriety" is a notion that defies simple description.

The situation is not unlike a good detective story, in which clues and evidence unfold over a period of time. The first set of clues may point broadly in one direction, providing "leads" to be pursued. Occasionally there will be false trails and embarrassing moments as seemingly good clues turn out to be value-less, but with thoughtful pursuit the lines of evidence become more firmly drawn. Perhaps the test of a valuable study is whether the concept of program effectiveness after the study is finished is further developed than it was before the study began.

Often, an evaluation report is produced and nothing happens. The uses for which the report was originally intended may not be realized, and the report may sit on someone's desk interminably. What happened?

At conferences of evaluation researchers, considerable time and energy is used for discussions of why evaluation data are not used more by decision-makers or change agents. What are some known factors that constrain the usefulness of evaluation reports?[4]

1. Organizations are remarkably resistant to change. The status quo is usually comfortable, and change typically requires new energy, resources, and cooperative soul-searching. Programs are typically imbedded in complex social systems, with histories and habits that make change an unsettling experience.

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[4]Some material for this section was taken from "The Process of Program Evaluation" by John Van Maanen. The Gransmanship Center News. Vol. 5, No. 1, 1979.

2. Programs have interests other than achieving their stated objectives. Program survival and personal needs for job security may tend to make administrators and staff cautious, preferring not to "rock the boat." They may also become political in ways that serve the occupational/professional needs of the staff, rather than the bona fide needs of the client and community.

3. The changes recommended by an evaluation process may not be ideologically acceptable to the program. When recommendations or findings threaten basic ideology or professional allegiances there is bound to be serious opposition. The classic example in the chemical dependency field is, of course, the denial by some factions of data supporting the legitimacy of a variety of treatment approaches and outcomes.

4. No study will answer all questions, making it an easy target for criticisms of inadequacy. Sometimes, a response to study results is to a shrill insistence that there should be more data, and a devaluing of the data actually available. Of course, all data will have some methodological shortcomings which can bring into question the credibility of the effort.

5. There is often the expectation that an evaluation effort will present, or should present, a definitive statement on the program's effectiveness. In practice, of course,

evaluations typically provoke more questions than they answer. This should be turned into a virtue, so that evaluation can be recognized as a process that leads to progressively greater understanding of effective performance.

6. Relationships between evaluator and program staff may turn from cooperative and mutually supportive to a state of wary coexistence and even hostility.
7. The program itself may have changed substantially during the course of the study, rendering the outcomes of the "old" program obsolete. This problem os substantial changes in the program is most critical when the study is of the controlled-experiment variety, where treatment changes in mid-experiment make the results uninterpretable.
8. The reasons that an evaluation was requested originally are varied, and not always entirely honorable. It has become a practice in some places to request an evaluation study, rather than appoint a committee, as a way of postponing a decision, realizing that an evaluation can take even longer than committee work and is politically easier to ignore.
9. Evaluation studies sometimes do miss the mark. The techniques of evaluation are still often crude, often used inappropriately, or produce findings of questionable validity. Even if valid from a research standpoint, their usefulness for decision-making can be severely restricted.

There are a few things under the control of the evaluator that might help to ensure greater attention from the program to the evaluation effort.

1. The early involvement of program administrators and staff in the evaluation effort is very important. No one likes to have an evaluation imposed on them, and involvement by those people affected by the evaluation should help to decrease resistance and increase cooperation.

2. The program could be kept updated continually on progress, and on preliminary findings.

3. The evaluator should be candid about the limitations of the evaluation effort. Evaluators are still learning their craft, and this should be acknowledged by all parties.

4. Evaluators should realize that substantial program change is not a likely result of the evaluation alone, and should adjust their own and others' expectations accordingly. Presentation of an evaluation report can be a useful and even major part of a larger change process, but there is a gap between data and action. The gap can be filled by the principles of "planned change" or "organizational development," professional specialty areas with a history and literature of their own.[5]

5. The Human Interaction Research Institute, published a study on factors influencing the success of NIMH-funded applied research, not necessarily program evaluation. By way of summary, they stated

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[5]See, for example, Bennis, W., Benne, K., and Chein, R. (eds.), The Planning of Change, 2nd ed., (New York: Holt, Rinehart, and Winston, Inc., 1969) or Beckhard, R. Organizational Development: Strategies and Models (Reading, Mass: Addison-Wesley, 1969).

that the successful project was "characterized by high communication, awareness and involvement with persons and groups within and outside the immediate environment from its earliest moments. The project staff made efforts to induce interest and cooperation from a wide group of supporters and potential users. Interaction and communication proceeded at a high rate through both formal and informal channels. Potential obstacles were shared concerns. The resolution processes often provided unanticipated benefit and strengthened the project. The development and maintenance of a network of communication took time and effort, but observable rewards justified the expenditure. The research was designed by the principal investigator, who devoted full time to the project. The host agency indicated its commitment by contributions of services and supplementary funds. The focus of the research was aimed at a felt need which enjoyed a shared interest from other people. Ipso facto, therefore, the product was readily marketable. Potential consumers were involved and informed. They encouraged early efforts at dissemination of findings, and were ready to consider implications for utilization...[6]

6. The evaluator should know from the beginning of the project who will be responsible for planning and executing various change processes once the report is delivered. There should be an understanding as to 1) who shall copy the report in sufficient numbers for distribution; 2) who shall distribute the report; 3) who shall contribute

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[6]Glaser, E.M. and Taylor, S.H. "Factors influencing the success of applied research: a study of ten NIMH-funded projects." Human Interaction Research Institute, Los Angeles, 1969.

to the distribution list; 4) who is responsible for briefing the staff, the governing board, advisory groups, the public, the press, other agencies, etc.; 5) who is responsible for formulating recommendations and other future directions; 6) who owns the raw data, the summary data, computer tapes, the report, and what is permissible for each, and their accessibility.

June, 1979